

DOMINION LABORATORY SERVICES

REPORT PRODUCED ON 12/01/2011

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CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE.

Location: YORKTOWN
 Dominion Lab Number: 393351
 Description :INTAKE
 Unit: 0

Submitter: GLENN BISHOP
 Sample Date: 10/04/2011

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
Ammonia as N, ppm	0.02	SM18TH 4500NH3F	NH3	DAWNE01	10/06/2011	1805	
Gross Alpha, pCi/L	< 2.110	EPA 900.0	RADIO	HERBE31	10/20/2011	1537	EHH
Gross Beta, pCi/L	106.000	EPA 900.0	RADIO	HERBE31	10/20/2011	1537	EHH
Boron as B, ppm	1.68	SM18TH 4500-B	B	DONNA13	10/18/2011	900	
COD, ppm	112.21	HACH 8000	COD	DONNA13	10/13/2011	1110	
Fluoride as F, ppm	0.345	EPA 300	FIC	DAWNE01	10/25/2011	1232	
NO3+NO2, ppm	0.14	EPA 353.2	NO3NO2	DONNA13	10/06/2011	849	
Oil and Grease, ppm	5.00	EPA 1664A	O&G	TANYA19	10/13/2011	945	
Phenol, ppm	< 0.01	EPA 420.1	PHENOL	TANYA19	10/28/2011	1036	
Sulfate as SO4, ppm	1077.05	EPA 300	SO4 IC	DAWNE01	10/25/2011	1232	
TK Nitrogen as N, ppm	< 0.30	EPA 351.2	TKN	DONNA13	10/11/2011	1033	
TOC, ppm	5.7	SM18TH 5310B	TOC	DONNA13	10/10/2011	1321	
TSS, ppm	9.3	SM18TH 2540D	TSS	TANYA19	10/10/2011	1400	
Aluminum as Al, ppm	< 0.09	SM18TH 3111D	AL	DAWNE01	11/29/2011	1408	
Antimony as Sb, ppb	< 1.	SM18TH 3113B	SBPPB	STEVE72	11/08/2011	711	
Arsenic as As, ppb	< 3.	SM18TH 3113B	ASPPB	STEVE72	10/24/2011	1459	
Barium as Ba, ppb	4.3	SM18TH 3113B	BAPPB	STEVE72	11/09/2011	839	
Beryllium as Be, ppb	< 0.2	SM18TH 3113B	BEPPB	STEVE72	11/02/2011	817	
Cadmium as Cd, ppb	2.0	SM18TH 3113B	CDPPB	STEVE72	11/01/2011	1527	
Chromium as Cr, ppb	3.	SM18TH 3113B	CRPPB	STEVE72	11/02/2011	339	
Cobalt as Co, ppb	< 0.6	SM18TH 3113B	COPPB	STEVE72	11/28/2011	908	
Copper as Cu, ppb	4.	SM18TH 3113B	CUPPB	STEVE72	11/01/2011	1905	
Iron as Fe, ppm	0.27	SM18TH 3111B	FE	DAWNE01	11/28/2011	1341	
Lead as Pb, ppb	4.	SM18TH 3113B	PBPPB	STEVE72	11/01/2011	1142	
Magnesium as Mg, ppm	545.00	SM18TH 3111B	MG	DAWNE01	11/29/2011	1037	
Manganese as Mn, ppm	0.09	SM18TH 3111B	MN	DAWNE01	11/29/2011	924	
Mercury as Hg, ppb	< 0.2	SM18TH 3112B	HGPPB	HERBE31	10/19/2011	1430	
Molybdenum as Mo, ppb	4.	SM18TH 3113B	MOPPB	STEVE72	11/28/2011	954	
Nickel as Ni, ppb	< 5.	SM18TH 3113B	NIPPB	STEVE72	11/02/2011	1420	
Selenium as Se, ppb	4.	SM18TH 3113B	SEPPB	STEVE72	10/25/2011	117	
Silver as Ag, ppb	< 0.1	SM18TH 3113B	AGPPB	STEVE72	11/09/2011	1438	
Thallium as Tl, ppm	10.0	EPA 279.2	TLPPB	STEVE72	11/02/2011	1351	

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Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
Tin as Sn, ppb	< 5.	SML8TH 3113B	SNPPB	STEVE72	10/24/2011	1.219	
Titanium as Ti, ppb	< 2.	EPA 283.2	TIPPB	STEVE72	11/29/2011	921	
Zinc as Zn, ppm	0.033	SML8TH 3111B	ZN	DAWNE01	11/28/2011	1155	
Methyl Chloride, ppb	< 1.10	EPA 624	VOA624	CHAR130	10/06/2011	1938	
Methyl Bromide, ppb	< 1.40	EPA 624	VOA624	CHAR130	10/06/2011	1938	
Vinyl Chloride, ppb	< 1.80	EPA 624	VOA624	CHAR130	10/06/2011	1938	
Chloroethane, ppb	< 1.10	EPA 624	VOA624	CHAR130	10/06/2011	1938	
Methylene Chloride, ppb	< 2.80	EPA 624	VOA624	CHAR130	10/06/2011	1938	
Acrolein, ppb	10.00	EPA 624	VOA624	CHAR130	10/06/2011	1938	
Acrylonitrile, ppb	< 1.50	EPA 624	VOA624	CHAR130	10/06/2011	1938	
Trichlorofluoromethane, ppb	< 2.30	EPA 624	VOA624	CHAR130	10/06/2011	1938	
1,1-Dichloroethylene, ppb	< 2.80	EPA 624	VOA624	CHAR130	10/06/2011	1938	
1,1-Dichloroethane, ppb	< 4.70	EPA 624	VOA624	CHAR130	10/06/2011	1938	
1,2-Trans-Dichloroethylene, ppb	< 1.60	EPA 624	VOA624	CHAR130	10/06/2011	1938	
Chloroform, ppb	< 1.60	EPA 624	VOA624	CHAR130	10/06/2011	1938	
1,2-Dichloroethane, ppb	< 2.80	EPA 624	VOA624	CHAR130	10/06/2011	1938	
1,1,1-Trichloroethane, ppb	< 3.80	EPA 624	VOA624	CHAR130	10/06/2011	1938	
Carbon Tetrachloride, ppb	< 2.80	EPA 624	VOA624	CHAR130	10/06/2011	1938	
Dichlorobromomethane, ppb	< 2.20	EPA 624	VOA624	CHAR130	10/06/2011	1938	
1,2-Dichloropropane, ppb	< 6.00	EPA 624	VOA624	CHAR130	10/06/2011	1938	
Cis-1,3-Dichloropropylene, ppb	< 5.00	EPA 624	VOA624	CHAR130	10/06/2011	1938	
Trans-1,3-Dichloropropylene, ppb	< 0.90	EPA 624	VOA624	CHAR130	10/06/2011	1938	
Trichloroethylene, ppb	< 1.90	EPA 624	VOA624	CHAR130	10/06/2011	1938	
Chlorodibromomethane, ppb	< 3.10	EPA 624	VOA624	CHAR130	10/06/2011	1938	
Benzene, ppb	< 4.40	EPA 624	VOA624	CHAR130	10/06/2011	1938	
1,1,2-Trichloroethane, ppb	< 5.00	EPA 624	VOA624	CHAR130	10/06/2011	1938	
2-Chloroethylvinyl Ether, ppb	< 1.20	EPA 624	VOA624	CHAR130	10/06/2011	1938	
Bromoform, ppb	< 4.70	EPA 624	VOA624	CHAR130	10/06/2011	1938	
1,1,2,2-Tetrachloroethane, ppb	< 6.90	EPA 624	VOA624	CHAR130	10/06/2011	1938	
Tetrachloroethylene, ppb	< 4.10	EPA 624	VOA624	CHAR130	10/06/2011	1938	
Toluene, ppb	< 6.00	EPA 624	VOA624	CHAR130	10/06/2011	1938	
Chlorobenzene, ppb	< 6.00	EPA 624	VOA624	CHAR130	10/06/2011	1938	

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Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
Ethylbenzene, ppb	< 7.20	EPA 624	VOA624	CHAR130	10/06/2011	1938	
1,3 Dichlorobenzene, ppb	< 5.00	EPA 624	VOA624	CHAR130	10/06/2011	1938	
1,4 Dichlorobenzene, ppb	< 5.00	EPA 624	VOA624	CHAR130	10/06/2011	1938	
1,2 Dichlorobenzene, ppb	< 5.00	EPA 624	VOA624	CHAR130	10/06/2011	1938	
Phenol, ppb	2.70	EPA 625	ACID625	CHAR130	10/20/2011	205	
2-Chlorophenol, ppb	3.30	EPA 625	ACID625	CHAR130	10/20/2011	205	
2-Nitrophenol, ppb	3.60	EPA 625	ACID625	CHAR130	10/20/2011	205	
2,4-Dimethylphenol, ppb	5.20	EPA 625	ACID625	CHAR130	10/20/2011	205	
2,4-Dichlorophenol, ppb	5.60	EPA 625	ACID625	CHAR130	10/20/2011	205	
4-Chloro-3-Methylphenol, ppb	7.50	EPA 625	ACID625	CHAR130	10/20/2011	205	
2,4,6-Trichlorophenol, ppb	2.70	EPA 625	ACID625	CHAR130	10/20/2011	205	
2,4-Dinitrophenol, ppb	42.00	EPA 625	ACID625	CHAR130	10/20/2011	205	
4-Nitrophenol, ppb	2.40	EPA 625	ACID625	CHAR130	10/20/2011	205	
2-Methyl-4,6-Dinitrophenol, ppb	24.00	EPA 625	ACID625	CHAR130	10/20/2011	205	
Pentachlorophenol, ppb	3.60	EPA 625	ACID 625	CHAR130	10/20/2011	205	
N-Nitrosodimethylamine, ppb	6.20	EPA 625	BN625	CHAR130	10/19/2011	2110	
Bis (-2-Chloroethyl) ether, ppb	5.70	EPA 625	BN625	CHAR130	10/19/2011	2110	
Bis (2-Chloroisopropyl) ether, ppb	5.70	EPA 625	BN625	CHAR130	10/19/2011	2110	
N-nitroso-Di-n-propylamine, ppb	3.60	EPA 625	BN625	CHAR130	10/19/2011	2110	
Hexachloroethane, ppb	2.40	EPA 625	BN625	CHAR130	10/19/2011	2110	
Nitrobenzene, ppb	4.20	EPA 625	BN625	CHAR130	10/19/2011	2110	
Isophorone, ppb	5.10	EPA 625	BN625	CHAR130	10/19/2011	2110	
Bis (-2-Chloroethoxy) Methane, ppb	5.30	EPA 625	BN625	CHAR130	10/19/2011	2110	
1,2,4-Trichlorobenzene, ppb	7.90	EPA 625	BN625	CHAR130	10/19/2011	2110	
Naphthalene, ppb	3.80	EPA 625	BN625	CHAR130	10/19/2011	2110	
Hexachlorobutadiene, ppb	1.80	EPA 625	BN625	CHAR130	10/19/2011	2110	
Hexachlorocyclopentadiene, ppb	10.00	EPA 625	BN625	CHAR130	10/19/2011	2110	
2-Chloronaphthalene, ppb	4.60	EPA 625	BN625	CHAR130	10/19/2011	2110	
Dimethyl Phthalate, ppb	7.50	EPA 625	BN625	CHAR130	10/19/2011	2110	
Acenaphthylene, ppb	3.50	EPA 625	BN625	CHAR130	10/19/2011	2110	
2,6-Dinitrotoluene, ppb	3.40	EPA 625	BN625	CHAR130	10/19/2011	2110	
Acenaphthene, ppb	3.00	EPA 625	BN625	CHAR130	10/19/2011	2110	

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2,4-Dinitrotoluene, ppb	5.70	EPA 625	BN625	CHAR130	10/19/2011	2110	
Diethylphthalate, ppb	7.40	EPA 625	BN625	CHAR130	10/19/2011	2110	
Fluorene, ppb	2.20	EPA 625	BN625	CHAR130	10/19/2011	2110	
4-Chlorophenyl-phenylether, ppb	4.20	EPA 625	BN625	CHAR130	10/19/2011	2110	
N-nitrosodiphenylamine, ppb	2.70	EPA 625	BN625	CHAR130	10/19/2011	2110	
1,2-Diphenylhydrazine, ppb	8.80	EPA 625	BN625	CHAR130	10/19/2011	2110	
4-Eromophenyl-phenylether, ppb	3.00	EPA 625	BN625	CHAR130	10/19/2011	2110	
Hexachlorobenzene, ppb	3.10	EPA 625	BN625	CHAR130	10/19/2011	2110	
Phenanthrene, ppb	5.40	EPA 625	BN625	CHAR130	10/19/2011	2110	
Anthracene, ppb	1.90	EPA 625	BN625	CHAR130	10/19/2011	2110	
Di-n-Butylphthalate, ppb	6.40	EPA 625	BN625	CHAR130	10/19/2011	2110	
Fluoranthene, ppb	2.20	EPA 625	BN625	CHAR130	10/19/2011	2110	
Benzidine, ppb	63.00	EPA 625	BN625	CHAR130	10/19/2011	2110	
Pyrene, ppb	3.80	EPA 625	BN625	CHAR130	10/19/2011	2110	
Butylbenzylphthalate, ppb	2.50	EPA 625	BN625	CHAR130	10/19/2011	2110	
Chrysene, ppb	2.50	EPA 625	BN625	CHAR130	10/19/2011	2110	
3,3'-Dichlorobenzidine, ppb	16.50	EPA 625	BN625	CHAR130	10/19/2011	2110	
Benzo (a) Anthracene, ppb	7.80	EPA 625	BN625	CHAR130	10/19/2011	2110	
Bis(2-ethylhexyl) Phthalate, ppb	2.50	EPA 625	BN625	CHAR130	10/19/2011	2110	
Di-n-octyl Phthalate, ppb	2.50	EPA 625	BN625	CHAR130	10/19/2011	2110	
Benzo (b) Fluoranthene, ppb	4.80	EPA 625	BN625	CHAR130	10/19/2011	2110	
Benzo (k) Fluoranthene, ppb	2.50	EPA 625	BN625	CHAR130	10/19/2011	2110	
Benzo (a) Pyrene, ppb	2.50	EPA 625	BN625	CHAR130	10/19/2011	2110	
Indeno (1,2,3-cd) Pyrene, ppb	3.70	EPA 625	BN625	CHAR130	10/19/2011	2110	
Dibenzo (a,h) anthracene, ppb	2.50	EPA 625	BN625	CHAR130	10/19/2011	2110	
Benzo (g,h,i) perylene, ppb	4.10	EPA 625	BN625	CHAR130	10/19/2011	2110	
Dis. Ti, ppb	9.1	EPA 279, 2	TLDISPPB	STEVE72	11/02/2011	1351	
Dis. Ti, ppb	2.	EPA 283, 2	TLDISPPB	STEVE72	11/29/2011	921	
Dis. Sn, ppb	5.	SML8TH 3113B	SNDISPPB	STEVE72	10/24/2011	1219	
Dis. Se, ppb	3.	SML8TH 3113B	SEDISPPB	STEVE72	10/25/2011	117	
Dis. Sp, ppb	1.	SML8TH 3113B	SBDISPPB	STEVE72	11/08/2011	711	
Dis. Pb, ppb	2.	SML8TH 3113B	PBDISPPB	STEVE72	11/01/2011	1142	

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Dis. Ni, ppb	< 5.	SML8TH	3113B	NIDISPPB	STEVE72	11/02/2011	1420
Dis. Mo, ppb	2.	SML8TH	3113B	MODISPPB	STEVE72	11/28/2011	954
Dis. Hg, ppb	< 0.2	SML8TH	3112B	HGDISPPB	HERBE31	10/19/2011	1430
Dis. Cu, ppb	3.	SML8TH	3113B	CUDISPPB	STEVE72	11/01/2011	1905
Dis. Cr, ppb	1.	SML8TH	3113B	CRDISPPB	STEVE72	11/02/2011	339
Dis. Co, ppb	0.6	SML8TH	3113B	CODISPPB	STEVE72	11/28/2011	908
Dis. Cd, ppb	2.4	SML8TH	3113B	CDDISPPB	STEVE72	11/01/2011	1527
Dis. Be, ppb	< 0.2	SML8TH	3113B	BEDISPPB	STEVE72	11/02/2011	817
Dis. Ba, ppb	30.	SML8TH	3113B	BADISPPB	STEVE72	11/09/2011	839
Dis. As, ppm	< 3.	SML8TH	3113B	ASDISPPB	STEVE72	10/24/2011	1459
Dis. Ag, ppb	< 0.1	SML8TH	3113B	AGDISPPB	STEVE72	11/09/2011	1438
Dis. Zn, ppm	0.030	SML8TH	3111B	ZNDIS	DAMNE01	11/28/2011	1155
Dis. Mn, ppm	0.09	SML8TH	3111B	MNDIS	DAMNE01	11/29/2011	924
Dis. Mg, ppm	560.00	SML8TH	3111B	MGDIS	DAMNE01	11/29/2011	1037
Dis. Fe, ppm	0.08	SML8TH	3111B	FEDIS	DAMNE01	11/28/2011	1341
Dis. Al, ppm	< 0.09	SML8TH	3111D	ALDIS	DAMNE01	11/29/2011	1408
Nitrate as N, ppm	0.15	EPA 353.2	NO3	DONNA13	10/06/2011	849	
T-Diss. Solids, ppm	1456.9	SML8TH	2540C	TDS	TANYA19	10/10/2011	1400
Chloride as Cl, ppm	7754.80	EPA 300	CLIC	DAMNE01	10/25/2011	1232	
T-Hard. as CaCO ₃ , ppm	2565.00	SML8TH	2340C	HARD	TANYA19	10/21/2011	630
Aldrin, ppb	< 0.050	EPA 608	608GC	HERBE31	10/14/2011		
Chlordane, ppb	< 0.200	EPA 608	608GC	HERBE31	10/14/2011		
Dieldrin, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011		
4,4-DDT, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011		
4,4-DDE, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011		
4,4-DDD, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011		
Endosulfan Sulfate, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011		
Endosulfan I, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011		
Endosulfan II, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011		
Endrin, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011		
Alpha-BHC, ppb	< 0.050	EPA 608	608GC	HERBE31	10/14/2011		
Beta-BHC, ppb	< 0.050	EPA 608	608GC	HERBE31	10/14/2011		

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Delta-BHC, ppb	< 0.050	EPA 608	608GC	HERBE31	10/14/2011		
Gamma-BHC (Lindane), ppb	< 0.050	EPA 608	608GC	HERBE31	10/14/2011		
Heptachlor, ppb	< 0.050	EPA 608	608GC	HERBE31	10/14/2011		
Kepone, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011		
Methoxychlor, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011		
Mirex, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011		
Endrin Aldehyde, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011		
Heptachlor Epoxide, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011		
Toxaphene, ppb	< 5.000	EPA 608	608GC	HERBE31	10/14/2011		
Arochlor 1016, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011		
Arochlor 1221, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011		
Arochlor 1232, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011		
Arochlor 1242, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011		
Arochlor 1248, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011		
Arochlor 1254, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011		
Arochlor 1260, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011		
Cyanide as CN, ppm	0.010	SM 4500CN E	CN	HERBE31	10/07/2011		
BOD, ppm	< 3.00	SM 5210 B	BOD	HERBE31	10/05/2011	900	NA
Color, PCU	< 7.0	SM18TH 2120B	CLR	HERBE31	10/06/2011	1000	NA
Bromide as Br, ppm	< 29.62	EPA 320.1	BR	HERBE31	11/01/2011		PB
Sulfide, ppm	< 0.05	SM18TH 4500S 2	SULFID	HERBE31	10/11/2011		NA
Hydrogen Sulfide, ppm	< 0.05	EPA 376.1	HYDSULF	HERBE31	10/26/2011		HV
MBAS as LAS, ppm	< 0.410	SM 5540C	SURF	HERBE31	10/07/2011		HV
Nonylphenol, ppb	< 10.0	EPA 8270C	NONYLPHNOL	HERBE31	10/14/2011		HV
Chlorpyrifos, ppb	< 0.2000	EPA 622	ORGPHOS	HERBE31	10/14/2011		SC
Demeton, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	10/14/2011		SC
Diazinon, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	10/14/2011		SC
Guthion, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	10/14/2011		SC
Malathion, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	10/14/2011		SC
Parathion, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	10/14/2011		SC

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Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 27, 2011

Mr. Glenn Bishop
Dominion Environmental Biology
4111 Castlewood Road
Richmond, VA 23234

RE: Project: Yorktown Intake
Pace Project No.: 3055204

3933J

Dear Mr. Bishop:

Enclosed are the analytical results for sample(s) received by the laboratory on October 06, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature of Jacquelyn Collins.

Jacquelyn Collins

jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.



Pace Analytical Services, Inc.
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CERTIFICATIONS

Project: Yorktown Intake
Pace Project No.: 3055204

Pennsylvania Certification IDs

1638 Roseytown Road Suites 2,3&4, Greensburg, PA
15601
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/NELAC Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH 0694
Delaware Certification
Florida/NELAC Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/NELAC Certification #: E-10358
Kentucky Certification #: 90133
Louisiana/NELAC Certification #: LA080002
Louisiana/NELAC Certification #: 4086
Maine Certification #: PA0091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nevada Certification
New Hampshire/NELAC Certification #: 2976
New Jersey/NELAC Certification #: PA 051
New Mexico Certification
New York/NELAC Certification #: 10888
North Carolina Certification #: 42708
Oregon/NELAC Certification #: PA200002
Pennsylvania/NELAC Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/NELAC Certification #: T104704188-09 TX
Utah/NELAC Certification #: ANTE
Virgin Island/PADEP Certification
Virginia Certification #: 00112
Washington Certification #: C1941
West Virginia Certification #: 143
Wisconsin/PADEP Certification
Wyoming Certification #: 87MS-Q

REPORT OF LABORATORY ANALYSIS

Page 2 of 10

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Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Yorktown Intake
Pace Project No.: 3055204

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3055204001	Yorktown Intake	Water	10/04/11 14:40	10/06/11 10:30

REPORT OF LABORATORY ANALYSIS

Page 3 of 10

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Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Yorktown Intake
Pace Project No.: 3055204

Lab ID	Sample ID	Method	Analysts	Analytes Reported
3055204001	Yorktown Intake	SM 7110C	JAL	1
		EPA 900.0m	EHH	1

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: Yorktown Intake
Pace Project No.: 3055204

Method: SM 7110C
Description: 7110C Gross Alpha
Client: Dominion Environmental Biology
Date: October 27, 2011

General Information:

1 sample was analyzed for SM 7110C. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Page 5 of 10

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PROJECT NARRATIVE

Project: Yorktown Intake

Pace Project No.: 3055204

Method: EPA 900.0m

Description: 900.0 Gross Alpha/Beta

Client: Dominion Environmental Biology

Date: October 27, 2011

General Information:

1 sample was analyzed for EPA 900.0m. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.



Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Yorktown Intake
Pace Project No.: 3055204

Sample: Yorktown Intake	Lab ID: 3055204001	Collected: 10/04/11 14:40	Received: 10/06/11 10:30	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC)	Units	Analyzed
Gross Alpha	SM 7110C	1.96 ± 1.29 (2.11)	pCi/L	10/23/11 22:12
Gross Beta	EPA 900.0m	106 ± 28.0 (30.3)	pCi/L	10/20/11 15:37
				12587-46-1 12587-47-2



Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Yorktown Intake
Pace Project No.: 3055204

QC Batch: RADC/9859 Analysis Method: EPA 900.0m
QC Batch Method: EPA 900.0m Analysis Description: 900.0 Gross Alpha/Beta
Associated Lab Samples: 3055204001

METHOD BLANK: 355773 Matrix: Water

Associated Lab Samples: 3055204001

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Gross Beta	-0.478 ± 0.643 (1.80)	pCi/L	10/20/11 07:50	



Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
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QUALITY CONTROL DATA

Project: Yorktown Intake
Pace Project No.: 3055204

QC Batch: RADC/9889 Analysis Method: SM 7110C
QC Batch Method: SM 7110C Analysis Description: 7110C Gross Alpha
Associated Lab Samples: 3055204001

METHOD BLANK: 357111 Matrix: Water
Associated Lab Samples: 3055204001

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Gross Alpha	2.32 ± 0.989 (1.17)	pCi/L	10/23/11 22:10	

QUALIFIERS

Project: Yorktown Intake
Pace Project No.: 3055204

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty

(MDC) - Minimum Detectable Concentration

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.



CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:																																																																																																																																																																																																																																																																																																																																																	
Company: Address: Email To: Phone: Requested Due Date/TAT:	Dominion Environmental Biology 4111 Castlewood Road Richmond, VA 23234 glen.bishop@tom.com 804-350-6918 Normal	Report To: Glenn Bishop Copy To: Purchase Order No.: Mastercard Project Name: Project Number:	Attention: Glenn Bishop Company Name: Dominion Address: 4111 Castlewood Road 23234 Fax/Circle: 46312743 Reference: Back Project: Manager: Patch Profile:	REGULATORY AGENCY NEDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER <input type="checkbox"/>	Site Location: STATE: VA																																																																																																																																																																																																																																																																																																																																																
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*Important Note: By signing this form you are accepting Face's NET 30 day payment terms and agreeing to take charge of 1% per month for any invoices not paid within 30 days.

DOMINION LABORATORY SERVICES

REPORT PRODUCED ON 12/01/2011

CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: YORKTOWN
 Dominion Lab Number: 393350
 Description : OUTFALL 004S
 Unit: 0

Submitter: GLENN BISHOP

Sample Date: 10/04/2011

Page 1 of 6

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
Gross Alpha, pCi/L	3.190	EPA 900.0	RADIO	HERBE31	10/20/2011	1606	
Gross Beta, pCi/L	21.200	EPA 900.0	RADIO	HERBE31	10/20/2011	1606	
Ammonia as N, ppm	< 0.01	SM18TH 4500NH3F	NH3	DAWNE01	10/06/2011	1805	
Boron as B, ppm	1.69	SM18TH 4500-B	B	DONNA13	10/18/2011	900	
COD, ppm	16.02	HACH 8000	COD	DONNA13	10/13/2011	1110	
Fluoride as F, ppm	0.198	EPA 300	FIC	DAWNE01	10/25/2011	1232	
NO3+NO2, ppm	< 0.01	EPA 353.2	NO3NO2	DONNA13	10/06/2011	849	
Phenol, ppm	0.01	EPA 420.1	PHENOL	TANYA19	10/28/2011	1036	
Sulfate as SO4, ppm	343.09	EPA 300	SO4IC	DAWNE01	10/25/2011	1232	
TK Nitrogen as N, ppm	< 0.30	EPA 351.2	TKN	DONNA13	10/11/2011	1033	
Aluminum as Al, ppm	< 0.09	SM18TH 3111D	AL	DAWNE01	11/29/2011	1408	
Antimony as Sb, ppb	1.	SM18TH 3113B	SBPPB	STEVE72	11/08/2011	711	
Arsenic as As, ppb	9.	SM18TH 3113B	ASPPB	STEVE72	10/24/2011	1459	
Barium as Ba, ppb	106.	SM18TH 3113B	BAPPB	STEVE72	11/09/2011	839	
Beryllium as Be, ppb	< 0.2	SM18TH 3113B	BEPPB	STEVE72	11/02/2011	817	
Cadmium as Cd, ppb	< 0.3	SM18TH 3113B	CDPPB	STEVE72	11/01/2011	1527	
Chromium as Cr, ppb	< 1.	SM18TH 3113B	CRPPB	STEVE72	11/02/2011	339	
Cobalt as Co, ppb	< 0.6	SM18TH 3113B	COPPB	STEVE72	11/28/2011	908	
Copper as Cu, ppb	1.	SM18TH 3113B	CUPPB	STEVE72	11/01/2011	1905	
Iron as Fe, ppm	0.07	SM18TH 3111B	FE	DAWNE01	11/28/2011	1341	
Lead as Pb, ppb	< 1.	SM18TH 3113B	PBPPB	STEVE72	11/01/2011	1142	
Magnesium as Mg, ppm	10.83	SM18TH 3111B	MG	DAWNE01	11/29/2011	1037	
Manganese as Mn, ppm	0.07	SM18TH 3111B	MN	DAWNE01	11/29/2011	924	
Mercury as Hg, ppb	< 0.2	SM18TH 3112B	HGPPB	HERBE31	10/19/2011	1430	
Molybdenum as Mo, ppb	889.	SM18TH 3113B	MOPPB	STEVE72	11/28/2011	954	
Nickel as Ni, ppb	< 5.	SM18TH 3113B	NIPPB	STEVE72	11/02/2011	1420	
Selenium as Se, ppb	9.	SM18TH 3113B	SEPPB	STEVE72	10/25/2011	1117	
Silver as Ag, ppb	< 0.1	SM18TH 3113B	AGPPB	STEVE72	11/09/2011	1438	
Thallium as Tl, ppb	0.3	EPA 279.2	TLPPB	STEVE72	11/02/2011	1351	
Tin as Sn, ppb	< 5.	SM18TH 3113B	SNPPB	STEVE72	10/24/2011	1219	
Titanium as Ti, ppb	< 2.	EPA 283.2	TIPPB	STEVE72	11/29/2011	921	
Zinc as Zn, ppm	0.010	SM18TH 3111B	ZN	DAWNE01	11/28/2011	1155	

Note 1: Initials in the Contract Analyst column indicate the analyst from the Contract Lab that ran the sample. Analyst for this parameter was the individual that entered results into the LIMS system.

DOMINION LABORATORY SERVICES

=====
 REPORT PRODUCED ON 12/01/2011
 =====

CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: YORKTOWN

Dominion Lab Number: 393350
 Description : OUTFALL 004S
 Unit: 0

Submitter: GLENN BISHOP

Sample Date: 10/04/2011

Page 2 of 6

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
Methyl Chloride, ppb	1.10	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Methyl Bromide, ppb	1.40	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Vinyl Chloride, ppb	1.80	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Chloroethane, ppb	1.10	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Methylene Chloride, ppb	2.80	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Acrolein, ppb	10.00	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Acrylonitrile, ppb	1.50	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Trichlorofluoromethane, ppb	2.30	EPA 624	VOA624	CHAR130	10/04/2011	1905	
1,1-Dichloroethylene, ppb	2.80	EPA 624	VOA624	CHAR130	10/04/2011	1905	
1,1-Dichloroethane, ppb	4.70	EPA 624	VOA624	CHAR130	10/04/2011	1905	
1,2-Trans-Dichloroethylene, ppb	1.60	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Chloroform, ppb	1.60	EPA 624	VOA624	CHAR130	10/04/2011	1905	
1,2-Dichloroethane, ppb	2.80	EPA 624	VOA624	CHAR130	10/04/2011	1905	
1,1,1-Trichloroethane, ppb	3.80	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Carbon Tetrachloride, ppb	2.80	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Dichlorobromomethane, ppb	2.20	EPA 624	VOA624	CHAR130	10/04/2011	1905	
1,2-Dichloropropane, ppb	6.00	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Cis-1,3-Dichloropropylene, ppb	5.00	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Trans-1,3-Dichloropropylene, ppb	0.90	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Trichloroethylene, ppb	1.90	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Chlorodibromomethane, ppb	3.10	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Benzene, ppb	4.40	EPA 624	VOA624	CHAR130	10/04/2011	1905	
1,1,2-Trichloroethane, ppb	5.00	EPA 624	VOA624	CHAR130	10/04/2011	1905	
2-Chloroethylvinyl Ether, ppb	1.20	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Bromoform, ppb	4.70	EPA 624	VOA624	CHAR130	10/04/2011	1905	
1,1,2,2-Tetrachloromethane, ppb	6.90	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Tetrachloroethylene, ppb	4.10	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Toluene, ppb	6.00	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Chlorobenzene, ppb	6.00	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Ethylbenzene, ppb	7.20	EPA 624	VOA624	CHAR130	10/04/2011	1905	
1,3 Dichlorobenzene, ppb	5.00	EPA 624	VOA624	CHAR130	10/04/2011	1905	
1,4 Dichlorobenzene, ppb	5.00	EPA 624	VOA624	CHAR130	10/04/2011	1905	

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CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: YORKTOWN
 Dominion Lab Number: 393350
 Description :OUTFAIL 004S
 Unit: 0

Submitter: GLENN BISHOP
 Sample Date: 10/04/2011

Page 3 of 6

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
1,2-Dichlorobenzene, ppb	< 5.00	EPA 624	VOA624	CHAR130	10/04/2011	1905	
Phenol, ppb	< 2.70	EPA 625	ACID625	CHAR130	10/20/2011	124	
2-Chlorophenol, ppb	< 3.30	EPA 625	ACID625	CHAR130	10/20/2011	124	
2-Nitrophenol, ppb	< 3.60	EPA 625	ACID625	CHAR130	10/20/2011	124	
2,4-Dimethylphenol, ppb	< 5.20	EPA 625	ACID625	CHAR130	10/20/2011	124	
2,4-Dichlorophenol, ppb	< 5.60	EPA 625	ACID625	CHAR130	10/20/2011	124	
4-Chloro-3-Methylphenol, ppb	< 7.50	EPA 625	ACID625	CHAR130	10/20/2011	124	
2,4,6-Trichlorophenol, ppb	< 7.70	EPA 625	ACID625	CHAR130	10/20/2011	124	
2,4-Dinitrophenol, ppb	< 42.00	EPA 625	ACID625	CHAR130	10/20/2011	124	
4-Nitrophenol, ppb	< 2.40	EPA 625	ACID625	CHAR130	10/20/2011	124	
2-Methyl-4,6-Dinitrophenol, ppb	< 24.00	EPA 625	ACID625	CHAR130	10/20/2011	124	
Pentachlorophenol, ppb	< 3.60	EPA 625	ACID625	CHAR130	10/20/2011	124	
N-Nitrosodimethylamine, ppb	< 6.20	EPA 625	BN625	CHAR130	10/20/2011	124	
Bis(-2-Chloroethyl) ether, ppb	< 5.70	EPA 625	BN625	CHAR130	10/19/2011	2028	
Bis(2-Chloroisopropyl) ether, ppb	< 5.70	EPA 625	BN625	CHAR130	10/19/2011	2028	
N-nitroso-Di-n-propylamine, ppb	< 3.60	EPA 625	BN625	CHAR130	10/19/2011	2028	
Hexachloroethane, ppb	< 2.40	EPA 625	BN625	CHAR130	10/19/2011	2028	
Nitrobenzene, ppb	< 4.20	EPA 625	BN625	CHAR130	10/19/2011	2028	
Isophorone, ppb	< 5.10	EPA 625	BN625	CHAR130	10/19/2011	2028	
Bis(-2-Chlorooethoxy) Methane, ppb	< 5.30	EPA 625	BN625	CHAR130	10/19/2011	2028	
1,2,4-Trichlorobenzene, ppb	< 7.90	EPA 625	BN625	CHAR130	10/19/2011	2028	
Naphthalene, ppb	< 3.80	EPA 625	BN625	CHAR130	10/19/2011	2028	
Hexachlorobutadiene, ppb	< 1.80	EPA 625	BN625	CHAR130	10/19/2011	2028	
Hexachlorocyclopentadiene, ppb	< 10.00	EPA 625	BN625	CHAR130	10/19/2011	2028	
2-Chloronaphthalene, ppb	< 4.60	EPA 625	BN625	CHAR130	10/19/2011	2028	
Dimethyl Phthalate, ppb	< 7.50	EPA 625	BN625	CHAR130	10/19/2011	2028	
Aceanaphthylene, ppb	< 3.50	EPA 625	BN625	CHAR130	10/19/2011	2028	
2,6-Dinitrotoluene, ppb	< 3.40	EPA 625	BN625	CHAR130	10/19/2011	2028	
Aceanaphthene, ppb	< 3.00	EPA 625	BN625	CHAR130	10/19/2011	2028	
2,4-Dinitrotoluene, ppb	< 5.70	EPA 625	BN625	CHAR130	10/19/2011	2028	
Diethylphthalate, ppb	< 7.40	EPA 625	BN625	CHAR130	10/19/2011	2028	
Fluorene, ppb	< 2.20	EPA 625	BN625	CHAR130	10/19/2011	2028	

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CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: YORKTOWN

Dominion Lab Number: 393350
 Description :OUTFALL 004S
 Unit: 0

Submitter: GLENN BISHOP

Sample Date: 10/04/2011

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
4-Chlorophenyl-phenylether, ppb	< 4.20	EPA 625	BN625	CHAR130	10/19/2011	2028	
N-nitrosodiphenylamine, ppb	< 2.70	EPA 625	BN625	CHAR130	10/19/2011	2028	
1,2-Diphenylhydrazine, ppb	< 8.80	EPA 625	BN625	CHAR130	10/19/2011	2028	
4-Bromophenyl-phenylether, ppb	< 3.00	EPA 625	BN625	CHAR130	10/19/2011	2028	
Hexachlorobenzene, ppb	< 3.10	EPA 625	BN625	CHAR130	10/19/2011	2028	
Phenanthrene, ppb	< 5.40	EPA 625	BN625	CHAR130	10/19/2011	2028	
Anthracene, ppb	< 1.90	EPA 625	BN625	CHAR130	10/19/2011	2028	
Di-n-Butylphthalate, ppb	< 6.40	EPA 625	BN625	CHAR130	10/19/2011	2028	
Fluoranthene, ppb	< 2.20	EPA 625	BN625	CHAR130	10/19/2011	2028	
Benzidine, ppb	63.00	EPA 625	BN625	CHAR130	10/19/2011	2028	
Pyrene, ppb	< 3.80	EPA 625	BN625	CHAR130	10/19/2011	2028	
Butylbenzylphthalate, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	2028	
Chrysene, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	2028	
3,3'-Dichlorobenzidine, ppb	< 16.50	EPA 625	BN625	CHAR130	10/19/2011	2028	
Benzo (a) Anthracene, ppb	< 7.80	EPA 625	BN625	CHAR130	10/19/2011	2028	
Bis(2-ethylhexyl) phthalate, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	2028	
Di-n-octyl phthalate, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	2028	
Benzo (b) fluoranthene, ppb	< 4.80	EPA 625	BN625	CHAR130	10/19/2011	2028	
Benzo (k) fluoranthene, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	2028	
Benzo (a) pyrene, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	2028	
Indeno (1,2,3-cd) pyrene, ppb	< 3.70	EPA 625	BN625	CHAR130	10/19/2011	2028	
Dibenzo (a,h) anthracene, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	2028	
Benzo (g,h,i) perylene, ppb	< 4.10	EPA 625	BN625	CHAR130	10/19/2011	2028	
Dis. Tl, ppb	0.2	EPA 279.2	TLDISPPB	STEVE72	11/02/2011	1351	
Dis. Ti, ppb	2.	EPA 283.2	SNDISPPB	STEVE72	11/29/2011	921	
Dis. Sn, ppb	5.	SM18TH 3113B	SEDISPPB	STEVE72	10/24/2011	1219	
Dis. Se, ppb	9.	SM18TH 3113B	SBDISPPB	STEVE72	10/25/2011	117	
Dis. Sb, ppb	1.	SM18TH 3113B	PBDISPPB	STEVE72	11/08/2011	711	
Dis. Pb, ppb	1.	SM18TH 3113B	NIDISPPB	STEVE72	11/01/2011	1142	
Dis. Ni, ppb	5.	SM18TH 3113B	MODISPPB	STEVE72	11/02/2011	1420	
Dis. Mo, ppb	886.	SM18TH 3113B	HGDISPPB	HERBE31	11/28/2011	954	
Dis. Hg, ppb	< 0.2	SM18TH 3112B			10/19/2011	1430	HV

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DOMINION LABORATORY SERVICES

REPORT PRODUCED ON 12/01/2011

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CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: YORKTOWN

Dominion Lab Number: 393350
 Description :OUTFALL 004S
 Unit: 0

Submitter: GLENN BISHOP

Sample Date: 10/04/2011

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
Dis. Cu, ppb	2.	SML8TH 3113B	CUDISPBP	STEVE72	11/01/2011	1905	
Dis. Cr, ppb	< 1.	SML8TH 3113B	CRDISPBP	STEVE72	11/02/2011	339	
Dis. Co, ppb	< 0.6	SML8TH 3113B	CODISPBP	STEVE72	11/28/2011	908	
Dis. Cd, ppb	< 0.3	SML8TH 3113B	CDDISPBP	STEVE72	11/01/2011	1527	
Dis. Be, ppb	< 0.2	SML8TH 3113B	BEDISPBP	STEVE72	11/02/2011	817	
Dis. Ba, ppb	94.	SML8TH 3113B	BADISPBP	STEVE72	11/09/2011	839	
Dis. As, ppb	7.	SML8TH 3113B	ASDISPBP	STEVE72	10/24/2011	1459	
Dis. Ag, ppb	< 0.1	SML8TH 3113B	AGDISPBP	STEVE72	11/09/2011	1438	
Dis. Zn, ppm	< 0.010	SML8TH 3111B	ZNDIS	DAWNE01	11/28/2011	1155	
Dis. Mn, ppm	0.05	SML8TH 3111B	MNDIS	DAWNE01	11/29/2011	924	
Dis. Mg, ppm	10.60	SML8TH 3111B	MGDIS	DAWNE01	11/29/2011	1037	
Dis. Fe, ppm	0.05	SML8TH 3111B	FEDIS	DAWNE01	11/28/2011	1341	
Dis. Al, ppm	0.09	SML8TH 3111D	ALDIS	DAWNE01	11/29/2011	1408	
Nitrate as N, ppm	0.01	EPA 353.2	NO3	DONNAL3	10/06/2011	849	
T-Diss. Solids, ppm	730.5	SML8TH 2540C	TDS	TANYA19	10/10/2011	1400	
Chloride as Cl, ppm	26.31	EPA 300	CLIC	DAWNE01	10/25/2011	1232	
T-Hard. as CaCO ₃ , ppm	318.06	SML8TH 2340C	HARD	TANYA19	10/21/2011	630	
Dis. V, ppb	4.	ASTMD 3373-93	VDISPFB	STEVE72	11/30/2011	1315	
Aldrin, ppb	< 0.050	EPA 608	608GC	HERBE31	10/14/2011	HV	
Chlordane, ppb	< 0.200	EPA 608	608GC	HERBE31	10/14/2011	HV	
Dieldrin, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
4,4'-DDT, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
4,4'-DDE, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
4,4'-DDD, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
Endosulfan Sulfate, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
Endosulfan I, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
Endosulfan II, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
Endrin, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
Alpha-BHC, ppb	< 0.050	EPA 608	608GC	HERBE31	10/14/2011	HV	
Beta-BHC, ppb	< 0.050	EPA 608	608GC	HERBE31	10/14/2011	HV	
Delta-BHC, ppb	< 0.050	EPA 608	608GC	HERBE31	10/14/2011	HV	
Gamma-BHC (Lindane), ppb	0.050	EPA 608	608GC	HERBE31	10/14/2011	HV	

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CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE
 Location: YORKTOWN
 Dominion Lab Number: 393350
 Description :OUTFALL 0045
 Unit: 0

Submitter: GLENN BISHOP
 Sample Date: 10/04/2011
 Page 6 of 6

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
Heptachlor, ppb	< 0.050	EPA 608	608GC	HERBE31	10/14/2011		HV
Kepone, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011		HV
Methoxychlor, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011		HV
Mirex, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011		HV
Endrin Alddehyde, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011		HV
Heptachlor Epoxide, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011		HV
Toxaphene, ppb	5.000	EPA 608	608GC	HERBE31	10/14/2011		HV
Arochlor 1016, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011		HV
Arochlor 1221, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011		HV
Arochlor 1232, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011		HV
Arochlor 1242, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011		HV
Arochlor 1248, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011		HV
Arochlor 1254, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011		HV
Arochlor 1260, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011		HV
Cyanide as CN, ppm	0.010	SM 4500CN E	CN	HERBE31	10/07/2011		HV
BOD, ppm	4.20	SM 5210 B	BOD	HERBE31	10/05/2011		NA
Color, PCU	11.0	SM18TH 2120B	CLR	HERBE31	10/06/2011		NA
Bromide as Br, ppm	2.41	EPA 320.1	BR	HERBE31	11/01/2011		PB
Sulfide, ppm	< 0.05	SM18TH 4500S 2	SULFID	HERBE31	10/11/2011		NA
Hydrogen Sulfide, ppm	< 0.05	EPA 376.1	HYDSULF	HERBE31	10/26/2011		HV
MBAS as LAS, ppm	0.010	SM 5540C	SURF	HERBE31	10/07/2011		HV
Nonylphenol, ppb	< 10.0	EPA 8270C	NONYLPNL	HERBE31	10/14/2011		HV
Chlorpyrifos, ppb	< 0.2000	EPA 622	ORGPHOS	HERBE31	10/14/2011		SC
Demeton, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	10/14/2011		SC
Diazinon, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	10/14/2011		SC
Guthion, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	10/14/2011		SC
Malathion, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	10/14/2011		SC
Parathion, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	10/14/2011		SC
Vanadium as V, ppb	< 5.	ASTMD 3373-93	VPPB	STEVE72	11/30/2011	1315	

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Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 234
Greensburg, PA 15601
(724)850-5600

October 27, 2011

Mr. Glenn Bishop
Dominion Environmental Biology
4111 Castlewood Road
Richmond, VA 23234

RE: Project: Yorktown 004s
Pace Project No.: 3055205 39335-

Dear Mr. Bishop:

Enclosed are the analytical results for sample(s) received by the laboratory on October 06, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that appears to read "Jacquelyn Collins".

Jacquelyn Collins

jacquelyn.collins@pacelabs.com
Project Manager

Enclosures:



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Yorktown 004s
Pace Project No.: 3055205

Pennsylvania Certification IDs

1638 Roseytown Road Suites 2,3&4, Greensburg, PA
15601
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/NELAC Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH 0694
Delaware Certification
Florida/NELAC Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/NELAC Certification #: E-10358
Kentucky Certification #: 90133
Louisiana/NELAC Certification #: LA080002
Louisiana/NELAC Certification #: 4086
Maine Certification #: PA0091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nevada Certification
New Hampshire/NELAC Certification #: 2976
New Jersey/NELAC Certification #: PA 051
New Mexico Certification
New York/NELAC Certification #: 10888
North Carolina Certification #: 42706
Oregon/NELAC Certification #: PA200002
Pennsylvania/NELAC Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2867
Texas/NELAC Certification #: T104704188-09 TX
Utah/NELAC Certification #: ANTE
Virgin Island/PADEP Certification
Virginia Certification #: 00112
Washington Certification #: C1941
West Virginia Certification #: 143
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

REPORT OF LABORATORY ANALYSIS

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: Yorktown 004s
Pace Project No.: 3055205

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3055205001	Yorktown 004s	Water	10/04/11 12:30	10/06/11 10:30

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: Yorktown 004s
Pace Project No.: 3055205

Lab ID	Sample ID	Method	Analysts	Analytes Reported
3055205001	Yorktown 004s	EPA 900.0m	EHH	2

REPORT OF LABORATORY ANALYSIS

Page 4 of 8

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Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: Yorktown 004s
Pace Project No.: 3055205

Method: EPA 900.0m
Description: 900.0 Gross Alpha/Beta
Client: Dominion Environmental Biology
Date: October 27, 2011

General Information:

1 sample was analyzed for EPA 900.0m. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

Page 5 of 8

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Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Yorktown 004s
Pace Project No.: 3055205

Sample: Yorktown 004s	Lab ID: 3055205001	Collected: 10/04/11 12:30	Received: 10/06/11 10:30	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC)	Units	Analyzed
Gross Alpha	EPA 900.0m	3.19 ± 1.45 (1.99)	pCi/L	10/20/11 16:06
Gross Beta	EPA 900.0m	21.2 ± 4.19 (1.54)	pCi/L	10/20/11 16:06



Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: Yorktown 004s
Pace Project No.: 3055205

QC Batch:	RADC/9859	Analysis Method:	EPA 900.0m
QC Batch Method:	EPA 900.0m	Analysis Description:	900.0 Gross Alpha/Beta
Associated Lab Samples:	3055205001		

METHOD BLANK: 355773	Matrix: Water
Associated Lab Samples: 3055205001	

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Gross Alpha	-0.135 ± 0.497 (1.59)	pCi/L	10/20/11 07:50	
Gross Beta	-0.478 ± 0.643 (1.80)	pCi/L	10/20/11 07:50	



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain of Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Important Note: By signing this form you are accepting: Payment terms are agreed to within the age of 1-3% per month for any invoices not paid within 30 days.



Sample Condition Upon Receipt

Client Name: Dominion Environmental

Project # 3055205

Courier: FedEx UPS USPS Client Commercial Pace Other
Tracking #: 1Z62V9750198418303

Optional	
Proj. Due Date:	
Proj. Name:	

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap

Bubble Bags None Other

foam, cardboard

Thermometer Used

3 5

Cooler Temperature

N/A

Temp should be above freezing to 6°C

Type of Ice: Wet Blue (None)

Biological Tissue is Frozen: Yes No

Samples on ice, cooling process has begun
Date and Initials of person examining contents: JMS 10-06-11

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	WT
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13. 27 mL HNO ₃ added to sample; pH < 2 10-06-11, 15:33
exceptions: VOA, coliform, TOC, O&G, W-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Initial when completed <u>JMS</u>
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Lot # of added preservative <u>RFII-0159-6</u>
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Person Contacted: _____

Date/Time: _____ Field Data Required? Y / N

Comments/ Resolution: _____

Project Manager Review:

Carrie Ferris

Date: 10/7/11

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: YORKTOWN

Dominion Lab Number: 393348
 Description : OUTFALL 003S
 Unit: 0

Submitter: GLENN BISHOP

Sample Date: 10/04/2011

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
Gross Alpha, pCi/L	5.030	EPA 900.0	RADIO	HERBE31	10/20/2011	922	
Gross Beta, pCi/L	6.000	EPA 900.0	RADIO	HERBE31	10/20/2011	922	
Ammonia as N, ppm	0.03	SM18TH 4500NH3F	NH3	DAWNE01	10/06/2011	1805	
Boron as B, ppm	0.36	SM18TH 4500-B	B	DONNA13	10/18/2011	900	
COD, ppm	28.89	HACH 8000	COD	DONNA13	10/13/2011	1110	
Fluoride as F, ppm	0.144	EPA 300	FIC	DAWNE01	10/25/2011	1232	
NO3+NO2, ppm	0.03	EPA 353.2	NO3+NO2	DONNA13	10/06/2011	849	
Phenol, ppm	< 0.01	EPA 420.1	PHENOL	TANYA19	10/28/2011	1036	
Sulfate as SO4, ppm	111.50	EPA 300	SO4IC	DAWNE01	10/25/2011	1232	
TK Nitrogen as N, ppm	0.37	EPA 351.2	TKN	DONNA13	10/11/2011	1033	
Aluminum as Al, ppm	< 0.09	SM18TH 3111D	AL	DAWNE01	11/29/2011	1408	
Antimony as Sb, ppb	< 2.	SM18TH 3113B	SBPPB	STEVE72	11/08/2011	711	
Arsenic as As, ppb	11.	SM18TH 3113B	ASPPB	STEVE72	10/24/2011	1459	
Barium as Ba, ppb	71.	SM18TH 3113B	BAPPB	STEVE72	11/09/2011	839	
Beryllium as Be, ppb	< 0.2	SM18TH 3113B	BEPPB	STEVE72	11/02/2011	817	
Cadmium as Cd, ppb	< 0.3	SM18TH 3113B	CDPPB	STEVE72	11/01/2011	1527	
Chromium as Cr, ppb	< 1.	SM18TH 3113B	CRPPB	STEVE72	11/02/2011	339	
Cobalt as Co, ppb	< 0.6	SM18TH 3113B	COPPB	STEVE72	11/28/2011	908	
Copper as Cu, ppb	< 1.	SM18TH 3113B	CUPPB	STEVE72	11/01/2011	1905	
Iron as Fe, ppm	0.42	SM18TH 3111B	FE	DAWNE01	11/28/2011	1341	
Lead as Pb, ppm	< 1.	SM18TH 3113B	PBPPB	STEVE72	11/01/2011	1142	
Magnesium as Mg, ppm	5.70	SM18TH 3111B	MG	DAWNE01	11/29/2011	1037	
Manganese as Mn, ppm	0.05	SM18TH 3111B	MN	DAWNE01	11/29/2011	924	
Mercury as Hg, ppb	< 0.2	SM18TH 3112B	HGPPB	HERBE31	10/19/2011	1430	
Molybdenum as Mo, ppb	24.	SM18TH 3113B	MOPPB	STEVE72	11/28/2011	954	
Nickel as Ni, ppb	< 5.	SM18TH 3113B	NIPPB	STEVE72	11/02/2011	1420	
Selenium as Se, ppb	< 3.	SM18TH 3113B	SEPPB	STEVE72	10/25/2011	1117	
Silver as Ag, ppb	< 0.1	SM18TH 3113B	AGPPB	STEVE72	11/09/2011	1438	
Thallium as Tl, ppb	< 0.2	EPA 279.2	TLPPB	STEVE72	11/02/2011	1351	
Tin as Sn, ppb	< 5.	SM18TH 3113B	SNPPB	STEVE72	10/24/2011	1219	
Titanium as Ti, ppb	< 2.	EPA 283.2	TIPPB	STEVE72	11/29/2011	921	
Zinc as Zn, ppm	< 0.010	SM18TH 3111B	ZN	DAWNE01	11/28/2011	1155	

Note 1: Initials in the Contract Analyst column indicate the analyst from the Contract Lab that ran the sample. Analyst for this parameter was the individual that entered results into the LIMS system.

CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: YORKTOWN
Dominion Lab Number: 3933348
Description : OUTFALL 003S
Unit: 0

Submitter: GLENN BISHOP
Sample Date: 10/04/2011

Page 2 of 6

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
Methyl Chloride, ppb	1.10	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Methyl Bromide, ppb	1.40	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Vinyl Chloride, ppb	1.80	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Chloroethane, ppb	1.10	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Methylene Chloride, ppb	2.80	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Acrolein, ppb	10.00	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Acrylonitrile, ppb	1.50	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Trichlorofluoromethane, ppb	2.30	EPA 624	VOA624	CHAR130	10/06/2011	1832	
1,1-Dichloroethylene, ppb	2.80	EPA 624	VOA624	CHAR130	10/06/2011	1832	
1,1-Dichloroethane, ppb	4.70	EPA 624	VOA624	CHAR130	10/06/2011	1832	
1,2-Trans-Dichloroethylene, ppb	1.60	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Chloroform, ppb	1.60	EPA 624	VOA624	CHAR130	10/06/2011	1832	
1,2-Dichloroethane, ppb	2.80	EPA 624	VOA624	CHAR130	10/06/2011	1832	
1,1,1-Trichloroethane, ppb	3.80	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Carbon Tetrachloride, ppb	2.80	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Dichlorobromomethane, ppb	2.20	EPA 624	VOA624	CHAR130	10/06/2011	1832	
1,2-Dichloropropane, ppb	6.00	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Cis-1,3-Dichloropropylene, ppb	5.00	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Trans-1,3-Dichloropropylene, ppb	0.90	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Trichloroethylene, ppb	1.90	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Chlorodibromomethane, ppb	3.10	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Benzene, ppb	4.40	EPA 624	VOA624	CHAR130	10/06/2011	1832	
1,1,2-Trichloroethylene, ppb	5.00	EPA 624	VOA624	CHAR130	10/06/2011	1832	
2-Chloroethylvinyl Ether, ppb	1.20	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Bromoform, ppb	4.70	EPA 624	VOA624	CHAR130	10/06/2011	1832	
1,1,2,2-Tetrachloroethane, ppb	6.90	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Tetrachloroethylene, ppb	4.10	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Toluene, ppb	6.00	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Chlorobenzene, ppb	6.00	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Ethylbenzene, ppb	7.20	EPA 624	VOA624	CHAR130	10/06/2011	1832	
1,3 Dichlorobenzene, ppb	5.00	EPA 624	VOA624	CHAR130	10/06/2011	1832	
1,4 Dichlorobenzene, ppb	5.00	EPA 624	VOA624	CHAR130	10/06/2011	1832	

Note 1: Initials in the Contract Analyst column indicate the analyst from the Contract Lab that ran the sample. Analyst for this parameter was the individual that entered results into the LIMS system.

CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: YORKTOWN
 Dominion Lab Number: 393348
 Description :OUTFALL 003S
 Unit: 0

Submitter: GLENN BISHOP

Sample Date: 10/04/2011

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
1,2-Dichlorobenzene, ppb	5.00	EPA 624	VOA624	CHAR130	10/06/2011	1832	
Phenol, ppb	< 2.70	EPA 625	ACID625	CHAR130	10/20/2011	41	
2-Chlorophenol, ppb	3.30	EPA 625	ACID625	CHAR130	10/20/2011	41	
2-Nitrophenol, ppb	3.60	EPA 625	ACID625	CHAR130	10/20/2011	41	
2,4-Dimethylphenol, ppb	5.20	EPA 625	ACID625	CHAR130	10/20/2011	41	
2,4-Dichlorophenol, ppb	5.60	EPA 625	ACID625	CHAR130	10/20/2011	41	
4-Chloro-3-Methylphenol, ppb	7.50	EPA 625	ACID625	CHAR130	10/20/2011	41	
2,4,6-Trichlorophenol, ppb	2.70	EPA 625	ACID625	CHAR130	10/20/2011	41	
2,4-Dinitrophenol, ppb	42.00	EPA 625	ACID625	CHAR130	10/20/2011	41	
4-Nitrophenol, ppb	2.40	EPA 625	ACID625	CHAR130	10/20/2011	41	
2-Methyl-4,6-Dinitrophenol, ppb	24.00	EPA 625	ACID625	CHAR130	10/20/2011	41	
Pentachlorophenol, ppb	3.60	EPA 625	ACID625	CHAR130	10/20/2011	41	
N-Nitrosodimethylamine, ppb	6.20	EPA 625	BN625	CHAR130	10/19/2011	1946	
Bis(-2-Chloroethyl) ether, ppb	5.70	EPA 625	BN625	CHAR130	10/19/2011	1946	
Bis(2-Chloroisopropyl) ether, ppb	5.70	EPA 625	BN625	CHAR130	10/19/2011	1946	
N-nitroso-Di-n-propylamine, ppb	3.60	EPA 625	BN625	CHAR130	10/19/2011	1946	
Hexachloroethane, ppb	2.40	EPA 625	BN625	CHAR130	10/19/2011	1946	
Nitrobenzene, ppb	4.20	EPA 625	BN625	CHAR130	10/19/2011	1946	
Isophorone, ppb	5.10	EPA 625	BN625	CHAR130	10/19/2011	1946	
Bis(-2-Chloroethoxy) Methane, ppb	5.30	EPA 625	BN625	CHAR130	10/19/2011	1946	
1,2,4-Trichlorobenzene, ppb	7.90	EPA 625	BN625	CHAR130	10/19/2011	1946	
Naphthalene, ppb	3.80	EPA 625	BN625	CHAR130	10/19/2011	1946	
Hexachlorobutadiene, ppb	1.80	EPA 625	BN625	CHAR130	10/19/2011	1946	
Hexachlorocyclopentadiene, ppb	10.00	EPA 625	BN625	CHAR130	10/19/2011	1946	
2-Chloronaphthalene, ppb	4.60	EPA 625	BN625	CHAR130	10/19/2011	1946	
Dimethyl Phthalate, ppb	7.50	EPA 625	BN625	CHAR130	10/19/2011	1946	
Acenaphthylene, ppb	3.50	EPA 625	BN625	CHAR130	10/19/2011	1946	
2,6-Dinitrotoluene, ppb	3.40	EPA 625	BN625	CHAR130	10/19/2011	1946	
Acenaphthene, ppb	3.00	EPA 625	BN625	CHAR130	10/19/2011	1946	
2,4-Dinitrotoluene, ppb	5.70	EPA 625	BN625	CHAR130	10/19/2011	1946	
Diethylphthalate, ppb	7.40	EPA 625	BN625	CHAR130	10/19/2011	1946	
Fluorene, ppb	2.20	EPA 625	BN625	CHAR130	10/19/2011	1946	

Note 1: Initials in the Contract Analyst column indicate the analyst from the Contract Lab that ran the sample. Analyst for this parameter was the individual that entered results into the LIMS system.

DOMINION LABORATORY SERVICES

REPORT PRODUCED ON 12/01/2011

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CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: YORKTOWN

Dominion Lab Number: 393348
Description : OUTFALL 003S
Unit: 0

Submitter: GLENN BISHOP

Sample Date: 10/04/2011

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
4-Chlorophenyl-phenylether, ppb	< 4.20	EPA 625	BN625	CHAR130	10/19/2011	1946	
N-nitrosodiphenylamine, ppb	< 2.70	EPA 625	BN625	CHAR130	10/19/2011	1946	
1,2-Diphenylhydrazine, ppb	< 8.80	EPA 625	BN625	CHAR130	10/19/2011	1946	
4-Bromophenyl-phenylether, ppb	< 3.00	EPA 625	BN625	CHAR130	10/19/2011	1946	
Hexachlorobenzene, ppb	< 3.10	EPA 625	BN625	CHAR130	10/19/2011	1946	
Phenanthrene, ppb	< 5.40	EPA 625	BN625	CHAR130	10/19/2011	1946	
Anthracene, ppb	< 1.90	EPA 625	BN625	CHAR130	10/19/2011	1946	
Di-n-Butylphthalate, ppb	< 6.40	EPA 625	BN625	CHAR130	10/19/2011	1946	
Fluoranthene, ppb	< 2.20	EPA 625	BN625	CHAR130	10/19/2011	1946	
Benzidine, ppb	< 63.00	EPA 625	BN625	CHAR130	10/19/2011	1946	
Pyrene, ppb	< 3.80	EPA 625	BN625	CHAR130	10/19/2011	1946	
Butylbenzylphthalate, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	1946	
Chrysene, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	1946	
3,3'-Dichlorobenzidine, ppb	< 16.50	EPA 625	BN625	CHAR130	10/19/2011	1946	
Benzo (a) Anthracene, ppb	< 7.80	EPA 625	BN625	CHAR130	10/19/2011	1946	
Bis(2-ethylhexyl) Phthalate, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	1946	
Di-n-octyl Phthalate, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	1946	
Benzo (b) fluoranthene, ppb	< 4.80	EPA 625	BN625	CHAR130	10/19/2011	1946	
Benzo (k) fluoranthene, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	1946	
Benzo (a) pyrene, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	1946	
Indeno (1,2,3-cd) pyrene, ppb	< 3.70	EPA 625	BN625	CHAR130	10/19/2011	1946	
Dibenz (a,h) anthracene, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	1946	
Benzo (g,h,i) perylene, ppb	< 4.10	EPA 625	BN625	CHAR130	10/19/2011	1946	
Dis. Tl, ppb	0.2	EPA 279.2	TLDISPPB	STEVE72	11/02/2011	1351	
Dis. Ti, ppb	2.	EPA 283.2	TLDISPPB	STEVE72	11/29/2011	921	
Dis. Sn, ppb	5.	SML8TH 3113B	SNDISPPB	STEVE72	10/24/2011	1219	
Dis. Se, ppb	3.	SML8TH 3113B	SEDISPPB	STEVE72	10/25/2011	117	
Dis. Sb, ppb	1.	SML8TH 3113B	SBDISPPB	STEVE72	11/08/2011	711	
Dis. Pb, ppb	<	SML8TH 3113B	PBDISPPB	STEVE72	11/01/2011	1142	
Dis. Ni, ppb	5.	SML8TH 3113B	NIDISPPB	STEVE72	11/02/2011	1420	
Dis. Mo, ppb	20.	SML8TH 3113B	MODISPPB	STEVE72	11/28/2011	954	
Dis. Hg, ppb	0.2	SML8TH 3112B	HGDISPPB	HERBE31	10/19/2011	1430	HV

Note 1: Initials in the Contract Analyst column indicate the analyst from the Contract Lab that ran the sample. Analyst For this parameter was the individual that entered results into the LIMS system.

CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: YORKTOWN
Dominion Lab Number: 393348
Description : OUTFALL 003S
Unit: 0

Submitter: GLENN BISHOP

Sample Date: 10/04/2011

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
Dis. Cu, ppb	< 1.	SML8TH	3113B	CUDISPPB	STEVE72	11/01/2011	1905
Dis. Cr, ppb	< 1.	SML8TH	3113B	CRDISPPB	STEVE72	11/02/2011	339
Dis. Co, ppb	0.6	SML8TH	3113B	CODISPPB	STEVE72	11/28/2011	908
Dis. Cd, ppb	0.3	SML8TH	3113B	CDDISPPB	STEVE72	11/01/2011	1527
Dis. Be, ppb	0.2	SML8TH	3113B	BEDISPPB	STEVE72	11/02/2011	817
Dis. Ba, ppb	64.	SML8TH	3113B	BADISPPB	STEVE72	11/09/2011	839
Dis. As, ppb	8.	SML8TH	3113B	ASDISPPB	STEVE72	10/24/2011	1459
Dis. Ag, ppb	< 0.1	SML8TH	3113B	AGDISPPB	STEVE72	11/09/2011	1438
Dis. Zn, PM	0.010	SML8TH	3111B	ZNDIS	DAWNE01	11/28/2011	1155
Dis. Mn, PM	0.06	SML8TH	3111B	MNDIS	DAWNE01	11/29/2011	924
Dis. Mg, PM	5.80	SML8TH	3111B	MGDIS	DAWNE01	11/29/2011	1037
Dis. Fe, PM	< 0.05	SML8TH	3111B	FEDIS	DAWNE01	11/28/2011	1341
Dis. Al, PM	< 0.09	SML8TH	3111D	ALDIS	DAWNE01	11/29/2011	1408
T-Dis. Solids, ppm	405.5	SML8TH	2544C	TDS	TANYA19	10/10/2011	1400
Nitrate as N, ppm	0.04	EPA 353.2	NO3	DONNA13	10/06/2011	849	
Chloride as Cl, ppm	10.75	EPA 300	CLIC	DAWNE01	10/25/2011	1232	
T-Hard. as CaCO ₃ , ppm	205.20	SML8TH	2344C	HARD	TANYA19	10/21/2011	630
Dis. V, ppb	4.	ASTMND 3373-93	VDTISPPB	STEVE72	11/30/2011	1315	
Aldrin, ppb	< 0.050	EPA 608	608GC	HERBE31	10/14/2011	HV	
Chlordane, ppb	< 0.200	EPA 608	608GC	HERBE31	10/14/2011	HV	
Dieldrin, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
4,4-DDT, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
4,4-DDE, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
4,4-DDD, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
Endosulfan Sulfate, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
Endosulfan I, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
Endosulfan II, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
Endrin, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
Alpha-BHC, ppb	< 0.050	EPA 608	608GC	HERBE31	10/14/2011	HV	
Beta-BHC, ppb	< 0.050	EPA 608	608GC	HERBE31	10/14/2011	HV	
Delta-BHC, ppb	< 0.050	EPA 608	608GC	HERBE31	10/14/2011	HV	
Gamma-BHC (Lindane), ppb	< 0.050	EPA 608	608GC	HERBE31	10/14/2011	HV	

Note 1: Initials in the Contract Analyst column indicate the analyst from the Contract Lab that ran the sample. Analyst for this parameter was the individual that entered results into the LIMS system.

DOMINION LABORATORY SERVICES

REPORT PRODUCED ON 12/01/2011

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CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: YORKTOWN
 Dominion Lab Number: 393348
 Description : OUTFALL 003S
 Unit: 0

Submitter: GLENN BISHOP

Sample Date: 10/04/2011

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
Heptachlor, ppb	< 0.050	EPA 608	608GC	HERBE31	10/14/2011	HV	
Kepone, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
Methoxychlor, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
Mirex, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
Endrin Aldehyde, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
Heptachlor Epoxide, ppb	< 0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
Toxaphene, ppb	< 5.000	EPA 608	608GC	HERBE31	10/14/2011	HV	
Arochlor 1016, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011	HV	
Arochlor 1221, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011	HV	
Arochlor 1232, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011	HV	
Arochlor 1242, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011	HV	
Arochlor 1248, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011	HV	
Arochlor 1254, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011	HV	
Arochlor 1260, ppb	< 1.0	EPA 608	608PCB	HERBE31	10/14/2011	HV	
Cyanide as CN, ppm	0.010	SM 4500CN E	CN	HERBE31	10/05/2011	900	NA
BOD, ppm	3.00	SM 5210 B	BOD	HERBE31	10/06/2011	1000	NA
Color, PCU	16.0	SM18TH 2120B	CLR	HERBE31	11/01/2011	PB	
Bromide as Br, ppm	< 0.01	EPA 320.1	BR	HERBE31	10/11/2011	830	NA
Sulfide, ppm	< 0.05	SM18TH 4500S 2	SULFID	HERBE31	10/26/2011	HV	
Hydrogen Sulfide, ppm	< 0.05	EPA 376.1	HYDSULF	HERBE31	10/07/2011	HV	
MBAS as LAS, ppm	< 0.010	SM 5540C	SURF	HERBE31	10/14/2011	HV	
Nonylphenol, ppb	< 10.0	EPA 8270C	NONYLPH	HERBE31	10/14/2011	SC	
Chlorpyrifos, ppb	< 0.2000	EPA 622	ORGPHOS	HERBE31	10/14/2011	SC	
Demeton, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	10/14/2011	SC	
Diazinon, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	10/14/2011	SC	
Guthion, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	10/14/2011	SC	
Malathion, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	10/14/2011	SC	
Parathion, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	10/14/2011	SC	
Vanadium as V, ppb	8.	ASTMD 3373-93	VP PB	STEVE72	11/30/2011	1315	

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CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: YORKTOWN
 Dominion Lab Number: 393349
 Description : EQUIP BLANK
 Unit: 0

Submitter: GLENN BISHOP
 Sample Date: 10/04/2011

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Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
Aluminum as Al, ppm	< 0.09	SM18TH	3111D	AL	DAWNE01	11/29/2011	
Antimony as Sb, ppb	< 1.	SM18TH	3113B	SBPPB	STEVE72	11/08/2011	711
Arsenic as As, ppb	< 3.	SM18TH	3113B	ASPPB	STEVE72	10/24/2011	1459
Barium as Ba, ppb	< 3.	SM18TH	3113B	BAPPB	STEVE72	11/09/2011	839
Beryllium as Be, ppb	0.2	SM18TH	3113B	BEPPB	STEVE72	11/02/2011	817
Cadmium as Cd, ppb	0.3	SM18TH	3113B	CDPPB	STEVE72	11/01/2011	1527
Chromium as Cr, ppb	< 1.	SM18TH	3113B	CRPPB	STEVE72	11/02/2011	339
Cobalt as Co, ppb	0.6	SM18TH	3113B	COPPB	STEVE72	11/28/2011	908
Copper as Cu, ppb	1.	SM18TH	3113B	CUPPB	STEVE72	11/01/2011	1905
Iron as Fe, ppm	0.05	SM18TH	3111B	FE	DAWNE01	11/28/2011	1341
Lead as Pb, ppb	< 1.	SM18TH	3113B	PBPPB	STEVE72	11/01/2011	1142
Magnesium as Mg, ppm	0.01	SM18TH	3111B	MG	DAWNE01	11/29/2011	1037
Manganese as Mn, ppm	0.02	SM18TH	3111B	MN	DAWNE01	11/29/2011	924
Mercury as Hg, ppb	0.2	SM18TH	3112B	HGPPB	HERBE31	10/19/2011	1430
Molybdenum as Mo, ppb	< 1.	SM18TH	3113B	MOPPB	STEVE72	11/28/2011	954
Nickel as Ni, ppb	5.	SM18TH	3113B	NIPPB	STEVE72	11/02/2011	1420
Selenium as Se, ppb	< 3.	SM18TH	3113B	SEPPB	STEVE72	10/25/2011	117
Silver as Ag, ppb	0.1	SM18TH	3113B	AGPPB	STEVE72	11/09/2011	1438
Thallium as Tl, ppb	0.2	EPA 279.2		TLPPB	STEVE72	11/02/2011	1351
Tin as Sn, ppb	5.	SM18TH	3113B	SNPPB	STEVE72	10/24/2011	1219
Titanium as Ti, ppb	2.	EPA 283.2		TIPPB	STEVE72	11/29/2011	921
Zinc as Zn, ppm	0.010	SM18TH	3111B	ZN	DAWNE01	11/28/2011	1155
Vanadium as V, ppb	< 1.	ASTMD 3373-93		VPPB	STEVE72	11/30/2011	1315

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Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: Yorktown 003s
Pace Project No.: 3055213

Sample: Yorktown 003s	Lab ID: 3055213001	Collected: 10/04/11 11:30	Received: 10/06/11 10:30	Matrix: Water		
PWS:	Site ID: Sample Type:					
Parameters	Method	Act ± Unc (MDC)	Units	Analyzed	CAS No.	Qual
Gross Alpha	EPA 900.0m	5.03 ± 2.35 (2.88)	pCi/L	10/20/11 09:22	12587-46-1	
Gross Beta	EPA 900.0m	6.00 ± 1.85 (2.00)	pCi/L	10/20/11 09:22	12587-47-2	

DOMINION LABORATORY SERVICES

REPORT PRODUCED ON 01/05/2012

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CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: YORKTOWN

Submitter: STACIE JENKINS

SL #	Site	Sample Date	Parameter	Result	Method	Analyst	Time Anal.	Date Anal.
395380	OUTFALL 003	01/04/2012	TOC, PPM	9.6	SM18TH 5310B	DONNA13	1039	01/05/2012
395381	OUTFALL 004	01/04/2012	TOC, PPM	7.6	SM18TH 5310B	DONNA13	1039	01/05/2012

Dominion Laboratory Log In Checklist

Station/Study:	YORK / VPA13		
Thermometer Used:	WOB 419393 61951674 or 61951693		
	Temp:	0.12	
	Type of Ice:	Wet	Blue
Chain of Custody Present	Yes	No	N/A
Chain of Custody Filled Out	Yes	No	N/A
Chain of Custody Relinquished	Yes	No	N/A
Sampler Name on COC	Yes	No	N/A
Samples Labels match COC	Yes	No	N/A
Includes date/time/ID/Analysis	Yes	No	N/A
All entries in Ink	Yes	No	N/A
Samples Arrived within Holding Time	Yes	No	N/A
Short Hold Time Analysis (<72hr)	Yes	No	N/A
Rush Turn Around Time Requested	Yes	No	N/A
Sufficient Volume	Yes	No	N/A
Correct Containers Used	Yes	No	N/A
Containers Used: (circle)	NH3	Solids	O&G
	TOC	OPO4	ABN
	IC	DRO	Phenol
	Hardness	Radioactivity	Volatiles
	Grain Size	Metals (Total or Dissolved)	
	Other:		
# of Bottles on COC correct	Yes	No	N/A
Filtered Volume received for Dissolved Tests	Yes	No	N/A
Custody Seal Intact	Yes	No	N/A
Date/Time Received:	1-5-2012 @ 0953		
Received by:	Dawn		
Due Date on COC match worksheet	Yes	No	N/A
Tests Required on COC match worksheet	Yes	No	N/A
Verified by:	D		
	Date: 1-5-12		

DOMINION LABORATORY SERVICES

REPORT PRODUCED ON 12/01/2011

CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: YORKTOWN
 Dominion Lab Number: 393347
 Description : OUTFALL, 002
 Unit: 0

Submitter: GLENN BISHOP
 Sample Date: 10/04/2011

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Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
Ammonia as N, ppm	0.03	SM18TH 4500NH3F	NH3	DAWNE01	10/06/2011	1805	
Gross Alpha, pCi/L	2.630	EPA 900.0	RADIO	HERBE31	10/20/2011	1615	EHH
Gross Beta, pCi/L	79.700	EPA 900.0	RADIO	HERBE31	10/20/2011	1615	EHH
Boron as B, ppm	1.52	SM18TH 4500-B	B	DONNA13	10/18/2011	900	
COD, ppm	115.26	HACH 8000	COD	DONNA13	10/13/2011	1110	
Fluoride as F, ppm	0.296	EPA 300	FIC	DAWNE01	10/25/2011	1232	
NO3+NO2, ppm	0.26	EPA 353.2	NO3NO2	DONNA13	10/06/2011	849	
Oil and Grease, ppm	< 5.00	EPA 1664A	O&G	TANYA19	10/13/2011	945	
Phenol, ppm	< 0.01	EPA 420.1	PHENOL	TANYA19	10/28/2011	1036	
Sulfate as SO4, ppm	1028.10	EPA 300	SO4IC	DAWNE01	10/25/2011	1232	
TK Nitrogen as N, ppm	< 0.30	EPA 351.2	TKN	DONNA13	10/11/2011	1033	
TOC, ppm	6.4	SM18TH 5310B	TOC	DONNA13	10/10/2011	1321	
TSS, ppm	9.4	SM18TH 2540D	TSS	TANYA19	10/10/2011	1400	
Aluminum as Al, ppm	< 0.09	SM18TH 3111D	AL	DAWNE01	11/29/2011	1408	
Antimony as Sb, ppb	< 1.	SM18TH 3113B	SBPPB	STEVE72	11/08/2011	711	
Arsenic as As, ppb	< 3.	SM18TH 3113B	ASPPB	STEVE72	10/24/2011	1459	
Barium as Ba, ppb	< 21.	SM18TH 3113B	BAPPB	STEVE72	11/09/2011	839	
Beryllium as Be, ppb	< 0.2	SM18TH 3113B	BEPBP	STEVE72	11/02/2011	817	
Cadmium as Cd, ppb	< 3.2	SM18TH 3113B	CDPPB	STEVE72	11/01/2011	1527	
Chromium as Cr, ppb	< 2.	SM18TH 3113B	CRPPB	STEVE72	11/02/2011	339	
Cobalt as Co, ppb	< 0.6	SM18TH 3113B	COPPB	STEVE72	11/28/2011	908	
Copper as Cu, ppb	< 2.	SM18TH 3113B	CUPPB	STEVE72	11/01/2011	1905	
Iron as Fe, ppm	0.35	SM18TH 3111B	FE	DAMNE01	11/28/2011	1341	
Lead as Pb, ppb	4.	SM18TH 3113B	PBPPB	STEVE72	11/01/2011	1142	
Magnesium as Mg, ppm	513.00	SM18TH 3111B	MG	DAWNE01	11/29/2011	1037	
Manganese as Mn, ppm	0.08	SM18TH 3111B	MN	DAWNE01	11/29/2011	924	
Mercury as Hg, ppb	< 0.2	SM18TH 3112B	HGPPB	HERBE31	10/19/2011	1430	
Molybdenum as Mo, ppb	8.	SM18TH 3113B	MOPPB	STEVE72	11/28/2011	954	
Nickel as Ni, ppb	13.	SM18TH 3113B	NIPPB	STEVE72	11/02/2011	1420	
Selenium as Se, ppb	< 3.	SM18TH 3113B	SEPPB	STEVE72	10/25/2011	1117	
Silver as Ag, ppb	< 0.1	SM18TH 3113B	AGPPB	STEVE72	11/09/2011	1438	
Thallium as Tl, ppm	9.5	EPA 279.2	TLPPB	STEVE72	11/02/2011	1351	

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DOMINION LABORATORY SERVICES

REPORT PRODUCED ON 12/01/2011

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CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: YORKTOWN
 Dominion Lab Number: 393347
 Description : OUTFALL 002
 Unit: 0

Submitter: GLENN BISHOP
 Sample Date: 10/04/2011

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
Tin as Sn, ppb	5.	SM18TH 3113B	SNPPB	STEVE72	10/24/2011	1219	
Titanium as Ti, ppb	< 2.	EPA 283.2	TIPPB	STEVE72	11/29/2011	921	
Methyl Chloride, ppb	1.10	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Methyl Bromide, ppb	1.40	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Vinyl Chloride, ppb	1.80	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Chloroethane, ppb	1.10	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Methylene Chloride, ppb	2.80	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Acrolein, ppb	10.00	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Acrylonitrile, ppb	1.50	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Trichlorofluoromethane, ppb	2.30	EPA 624	VOA624	CHAR130	10/06/2011	1759	
1,1-Dichloroethylene, ppb	2.80	EPA 624	VOA624	CHAR130	10/06/2011	1759	
1,1-Dichloroethane, ppb	4.70	EPA 624	VOA624	CHAR130	10/06/2011	1759	
1,2-Trans-Dichloroethylene, ppb	1.60	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Chloroform, ppb	1.60	EPA 624	VOA624	CHAR130	10/06/2011	1759	
1,2-Dichloroethane, ppb	2.80	EPA 624	VOA624	CHAR130	10/06/2011	1759	
1,1,1-Trichloroethane, ppb	3.80	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Carbon Tetrachloride, ppb	2.80	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Dichlorobromomethane, ppb	2.20	EPA 624	VOA624	CHAR130	10/06/2011	1759	
1,2-Dichloropropane, ppb	6.00	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Cis-1,3-Dichloropropylene, ppb	5.00	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Trans-1,3-Dichloropropylene, ppb	0.90	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Trichloroethylene, ppb	1.90	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Chlorodibromomethane, ppb	3.10	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Benzene, ppb	4.40	EPA 624	VOA624	CHAR130	10/06/2011	1759	
1,1,2-Trichloroethylene, ppb	5.00	EPA 624	VOA624	CHAR130	10/06/2011	1759	
2-Chloroethylvinyl Ether, ppb	1.20	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Bromoform, ppb	4.70	EPA 624	VOA624	CHAR130	10/06/2011	1759	
1,1,2,2-Tetrachloroethane, ppb	6.90	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Tetrachloroethylene, ppb	4.10	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Toluene, ppb	6.00	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Chlorobenzene, ppb	6.00	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Ethylbenzene, ppb	7.20	EPA 624	VOA624	CHAR130	10/06/2011	1759	

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CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: YORKTOWN
 Dominion Lab Number: 393347
 Description : OUTFALL 002
 Unit: 0

Submitter: GLENN BISHOP
 Sample Date: 10/04/2011

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
1,3 Dichlorobenzene, ppb	5.00	EPA 624	VOA624	CHAR130	10/06/2011	1759	
1,4 Dichlorobenzene, ppb	5.00	EPA 624	VOA624	CHAR130	10/06/2011	1759	
1,2 Dichlorobenzene, ppb	5.00	EPA 624	VOA624	CHAR130	10/06/2011	1759	
Phenol, ppb	2.70	EPA 625	ACID625	CHAR130	10/19/2011	2317	
2-Chlorophenol, ppb	3.30	EPA 625	ACID625	CHAR130	10/19/2011	2317	
2-Nitrophenol, ppb	3.60	EPA 625	ACID625	CHAR130	10/19/2011	2317	
2,4-Dimethylphenol, ppb	5.20	EPA 625	ACID625	CHAR130	10/19/2011	2317	
2,4-Dichlorophenol, ppb	5.60	EPA 625	ACID625	CHAR130	10/19/2011	2317	
4-Chloro-3-Methylphenol, ppb	7.50	EPA 625	ACID625	CHAR130	10/19/2011	2317	
2,4,6-Trichlorophenol, ppb	2.70	EPA 625	ACID625	CHAR130	10/19/2011	2317	
2,4-Dinitrophenol, ppb	42.00	EPA 625	ACID625	CHAR130	10/19/2011	2317	
4-Nitrophenol, ppb	2.40	EPA 625	ACID625	CHAR130	10/19/2011	2317	
2-Methyl-4,6-Dinitrophenol, ppb	24.00	EPA 625	ACID625	CHAR130	10/19/2011	2317	
Pentachlorophenol, ppb	3.60	EPA 625	ACID625	CHAR130	10/19/2011	2317	
N-Nitrosodimethylamine, ppb	6.20	EPA 625	BN625	CHAR130	10/19/2011	1822	
Bis(-2-Chloroethyl) ether, ppb	5.70	EPA 625	BN625	CHAR130	10/19/2011	1822	
Bis(2-Chloroisopropyl) ether, ppb	5.70	EPA 625	BN625	CHAR130	10/19/2011	1822	
N-nitroso-Di-n-propylamine, ppb	3.60	EPA 625	BN625	CHAR130	10/19/2011	1822	
Hexachloroethane, ppb	2.40	EPA 625	BN625	CHAR130	10/19/2011	1822	
Nitrobenzene, ppb	4.20	EPA 625	BN625	CHAR130	10/19/2011	1822	
Isophorone, ppb	5.10	EPA 625	BN625	CHAR130	10/19/2011	1822	
Bis(-2-Chloroethoxy) Methane, ppb	5.30	EPA 625	BN625	CHAR130	10/19/2011	1822	
1,2,4-Trichlorobenzene, ppb	7.90	EPA 625	BN625	CHAR130	10/19/2011	1822	
Naphthalene, ppb	3.80	EPA 625	BN625	CHAR130	10/19/2011	1822	
Hexachlorobutadiene, ppb	1.80	EPA 625	BN625	CHAR130	10/19/2011	1822	
Hexachlorocyclooctadiene, ppb	10.00	EPA 625	BN625	CHAR130	10/19/2011	1822	
2-Chloronaphthalene, ppb	4.60	EPA 625	BN625	CHAR130	10/19/2011	1822	
Dimethyl Phthalate, ppb	7.50	EPA 625	BN625	CHAR130	10/19/2011	1822	
Acenaphthyline, ppb	3.50	EPA 625	BN625	CHAR130	10/19/2011	1822	
2,6-Dinitrotoluene, ppb	3.40	EPA 625	BN625	CHAR130	10/19/2011	1822	
Acenaphthene, ppb	3.00	EPA 625	BN625	CHAR130	10/19/2011	1822	
2,4-Dinitrotoluene, ppb	5.70	EPA 625	BN625	CHAR130	10/19/2011	1822	

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CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: YORKTOWN
Dominion Lab Number: 3933347
Description :OUTFALL 002
Unit: 0

Submitter: GLENN BISHOP
Sample Date: 10/04/2011

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
Diethylphthalate, ppb	< 7.40	EPA 625	BN625	CHAR130	10/19/2011	1:822	
Fluorene, ppb	< 2.20	EPA 625	BN625	CHAR130	10/19/2011	1:822	
4-Chlorophenyl-phenylether, ppb	< 4.20	EPA 625	BN625	CHAR130	10/19/2011	1:822	
N-nitrosodiphenylamine, ppb	< 2.70	EPA 625	BN625	CHAR130	10/19/2011	1:822	
1,2-Diphenylhydrazine, ppb	< 8.80	EPA 625	BN625	CHAR130	10/19/2011	1:822	
4-Bromophenyl-phenylether, ppb	< 3.00	EPA 625	BN625	CHAR130	10/19/2011	1:822	
Hexachlorobenzene, ppb	< 3.10	EPA 625	BN625	CHAR130	10/19/2011	1:822	
Phenanthrene, ppb	< 5.40	EPA 625	BN625	CHAR130	10/19/2011	1:822	
Anthracene, ppb	< 1.90	EPA 625	BN625	CHAR130	10/19/2011	1:822	
Di-n-Butylphthalate, ppb	< 6.40	EPA 625	BN625	CHAR130	10/19/2011	1:822	
Fluoranthene, ppb	< 2.20	EPA 625	BN625	CHAR130	10/19/2011	1:822	
Benzidine, ppb	< 63.00	EPA 625	BN625	CHAR130	10/19/2011	1:822	
Pyrone, ppb	< 3.80	EPA 625	BN625	CHAR130	10/19/2011	1:822	
Butylbenzylphthalate, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	1:822	
Chrysene, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	1:822	
3,3'-Dichlorobenzidine, ppb	< 16.50	EPA 625	BN625	CHAR130	10/19/2011	1:822	
Benzo (a) Anthracene, ppb	< 7.80	EPA 625	BN625	CHAR130	10/19/2011	1:822	
Bis(2-ethylhexyl) Phthalate, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	1:822	
Di-n-octyl Phthalate, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	1:822	
Benzo (b) fluoranthene, ppb	< 4.80	EPA 625	BN625	CHAR130	10/19/2011	1:822	
Benzo (k) fluoranthene, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	1:822	
Benzo (a) pyrene, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	1:822	
Incheno (1,2,3-cd) pyrene, ppb	< 3.70	EPA 625	BN625	CHAR130	10/19/2011	1:822	
Dibenzo (a, h) anthracene, ppb	< 2.50	EPA 625	BN625	CHAR130	10/19/2011	1:822	
Benzo (g, h, i) perylene, ppb	< 4.10	EPA 625	BN625	CHAR130	10/19/2011	1:822	
Dis. Tl, ppb	< 5.3	EPA 279.2	TLDISPPB	STEVE72	11/02/2011	1:351	
Dis. Ti, ppb	< 2.	EPA 283.2	TLDISPPB	STEVE72	11/29/2011	921	
Dis. Sn, ppb	< 5.	SML18TH 3113B	SNDISPPB	STEVE72	10/24/2011	1219	
Dis. Se, ppb	< 3.	SML18TH 3113B	SEDISPPB	STEVE72	10/25/2011	117	
Dis. Sb, ppb	< 1.	SML18TH 3113B	SBDISPPB	STEVE72	11/08/2011	711	
Dis. Pb, ppb	< 2.	SML18TH 3113B	PBDISPPB	STEVE72	11/01/2011	1142	
Dis. Ni, ppb	< 5.	SML18TH 3113B	NIDISPPB	STEVE72	11/02/2011	1420	

Note 1: Initials in the Contract Analyst column indicate the analyst from the Contract Lab that ran the sample. Analyst for this parameter was the individual that entered results into the LIMS system.

CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: YORKTOWN
Dominion Lab Number: 393347
Description : OUTFALL 002
Unit: 0

Submitter: GLENN BISHOP

Sample Date: 10/04/2011

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
Dis. Mo, ppb	7.	SML18TH	3113B	MODISPPB	STEVE72	11/28/2011	954
Dis. Hg, ppb	0.2	SML18TH	3112B	HGDISPPB	HERBE31	10/19/2011	1430
Dis. Cu, ppb	< 1.	SML18TH	3113B	CUDISPPB	STEVE72	11/01/2011	1905
Dis. Cr, ppb	2.	SML18TH	3113B	CRDISPPB	STEVE72	11/02/2011	339
Dis. Co, ppb	< 0.6	SML18TH	3113B	CODISPPB	STEVE72	11/28/2011	908
Dis. Cd, ppb	1.8	SML18TH	3113B	CDDISPPB	STEVE72	11/01/2011	1527
Dis. Be, ppb	< 0.2	SML18TH	3113B	BEDISPPB	STEVE72	11/02/2011	817
Dis. Ba, ppb	21.	SML18TH	3113B	BADISPPB	STEVE72	11/09/2011	839
Dis. As, ppb	< 3.	SML18TH	3113B	ASDISPPB	STEVE72	10/24/2011	1459
Dis. Ag, ppb	0.1	SML18TH	3113B	AGDISPPB	STEVE72	11/09/2011	1438
Dis. Zn, PPM	0.031	SML18TH	3111B	ZNDIS	DAWNE01	11/28/2011	1155
Dis. Mn, PPM	0.06	SML18TH	3111B	MNDIS	DAWNE01	11/29/2011	924
Dis. Mg, PPM	515.00	SML18TH	3111B	MGDIS	DAWNE01	11/29/2011	1037
Dis. Fe, PPM	0.08	SML18TH	3111B	FEDIS	DAWNE01	11/28/2011	1341
Dis. Al, PPM	< 0.09	SML18TH	3111D	ALDIS	DAWNE01	11/29/2011	1408
Nitrate as N, PPM	0.26	EPA 353-2	NO3	DONNA13	10/06/2011	849	
Zinc as Zn, PPM	0.028	SML18TH	3111B	ZN	DAWNE01	11/28/2011	1155
T-Hard. as CaCO ₃ , PPM	3591.00	SML18TH	2340C	HARD	TANYA19	10/21/2011	630
Chloride as Cl, PPM	7470.56	EPA 300	CLIC	DAWNE01	10/25/2011	1232	
T-Dis. Solids, PPM	14310.5	SML18TH	2540C	TDS	TANYA19	10/10/2011	1400
Aldrin, ppb	< 0.050	EPA 608	608GC	HERBE31	10/14/2011		
Chlordane, ppb	0.200	EPA 608	608GC	HERBE31	10/14/2011		
Diechlorin, ppb	0.100	EPA 608	608GC	HERBE31	10/14/2011		
4,4-DDT, ppb	0.100	EPA 608	608GC	HERBE31	10/14/2011		
4,4-DDE, ppb	0.100	EPA 608	608GC	HERBE31	10/14/2011		
4,4-DDD, ppb	0.100	EPA 608	608GC	HERBE31	10/14/2011		
Endosulfan Sulfate, ppb	0.100	EPA 608	608GC	HERBE31	10/14/2011		
Endosulfan I, ppb	0.100	EPA 608	608GC	HERBE31	10/14/2011		
Endosulfan II, ppb	0.100	EPA 608	608GC	HERBE31	10/14/2011		
Endrin, ppb	0.100	EPA 608	608GC	HERBE31	10/14/2011		
Alpha-BHC, ppb	0.050	EPA 608	608GC	HERBE31	10/14/2011		
Beta-BHC, ppb	0.050	EPA 608	608GC	HERBE31	10/14/2011		

Note 1: Initials in the Contract Analyst column indicate the analyst from the Contract Lab that ran the sample. Analyst for this parameter was the individual that entered results into the LIMS system.

CERTIFICATE OF ANALYSIS TEST RESULTS BY SAMPLE

Location: YORKTOWN
 Dominion Lab Number: 393347
 Description :OUTFALL 002
 Unit: 0

Submitter: GLENN BISHOP

Sample Date: 10/04/2011

Parameter	Result	Method	Test Code	Analyst	Date Analyzed	Time Analyzed	Contract Analyst
Delta-BHC, ppb	> 0.050	EPA 608	608GC	HERBE31	10/14/2011	HV	
Gamma-BHC (Lindane), ppb	0.050	EPA 608	608GC	HERBE31	10/14/2011	HV	
Heptachlor, ppb	0.050	EPA 608	608GC	HERBE31	10/14/2011	HV	
Kepone, ppb	0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
Methoxychlor, ppb	0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
Mirex, ppb	0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
Endrin Aldehyde, ppb	0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
Heptachlor Epoxide, ppb	0.100	EPA 608	608GC	HERBE31	10/14/2011	HV	
Toxaphene, ppb	5.000	EPA 608	608GC	HERBE31	10/14/2011	HV	
Arochlor 1016, ppb	1.0	EPA 608	608PCB	HERBE31	10/14/2011	HV	
Arochlor 1221, ppb	1.0	EPA 608	608PCB	HERBE31	10/14/2011	HV	
Arochlor 1232, ppb	1.0	EPA 608	608PCB	HERBE31	10/14/2011	HV	
Arochlor 1242, ppb	1.0	EPA 608	608PCB	HERBE31	10/14/2011	HV	
Arochlor 1248, ppb	1.0	EPA 608	608PCB	HERBE31	10/14/2011	HV	
Arochlor 1254, ppb	1.0	EPA 608	608PCB	HERBE31	10/14/2011	HV	
Arochlor 1260, ppb	1.0	EPA 608	608PCB	HERBE31	10/14/2011	HV	
Cyanide as CN, ppm	0.010	SM 4500CN E	CN	HERBE31	10/07/2011	HV	
BOD, ppm	4.00	SM 5210 B	BOD	HERBE31	10/05/2011	900	NA
Color, PCU	10.0	SM18TH 2120B	CLR	HERBE31	10/06/2011	1000	NA
Bromide as Br, ppm	30.11	EPA 320.1	BR	HERBE31	11/01/2011	PB	
Sulfide, ppm	< 0.05	SM18TH 4500S 2	SULFID	HERBE31	10/11/2011	830	NA
Chrom. +6 as Cr6, ppm	< 0.005	SM 3500-CR D	CR6	HERBE31	10/05/2011	1045	PB
Nonylphenol, ppb	> 10.0	EPA 8270C	NONYLPNL	HERBE31	10/14/2011	HV	
Hydrogen Sulfide, ppm	< 0.05	EPA 376.1	HYDSULF	HERBE31	10/26/2011	HV	
MBAS as LAS, ppm	0.360	SM 5540C	SURF	HERBE31	10/07/2011	HV	
Chlorpyrifos, ppb	< 0.2000	EPA 622	ORGPHOS	HERBE31	10/14/2011	SC	
Demeton, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	10/14/2011	SC	
Diazinon, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	10/14/2011	SC	
Guthion, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	10/14/2011	SC	
Malathion, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	10/14/2011	SC	
Parathion, ppb	< 1.0000	EPA 622	ORGPHOS	HERBE31	10/14/2011	SC	

Note 1: Initials in the Contract Analyst column indicate the analyst from the Contract Lab that ran the sample. Analyst for this parameter was the individual that entered results into the LIMS system.

Dominion Laboratory Login Checklist

Station/Study: <u>Yu Cons</u>	WO#: <u>418967</u>	
Thermometer Used: <u>61951674 or 61951693</u>	Temp: <u>2.7</u>	
Type of Ice: <u>Wet</u> Blue None		
Chain of Custody Present	<u>Yes</u> No N/A	
Chain of Custody Filled Out	<u>Yes</u> No N/A	
Chain of Custody Relinquished	<u>Yes</u> No N/A	
Sampler Name on COC	<u>Yes</u> No N/A	
Samples Labels match COC	<u>Yes</u> No N/A	
Includes date/time/ID/Analysis	<u>Yes</u> No N/A	
All entries in Ink	<u>Yes</u> No N/A	
Samples Arrived within Holding Time	<u>Yes</u> No N/A	
Short Hold Time Analysis (<72hr)	<u>Yes</u> No N/A	
Rush Turn Around Time Requested	Yes <u>No</u> N/A	
Sufficient Volume	<u>Yes</u> No N/A	
Correct Containers Used	<u>Yes</u> No N/A	
Containers Used: (circle)	<u>NH3</u> <u>Solids</u> <u>O&G</u> <u>TOC</u> <u>OP04</u> <u>ABN</u> <u>IC</u> <u>DRO</u> <u>Phenol</u> <u>Hardness</u> <u>Radioactivity</u> <u>Volatiles</u> <u>Grain Size</u> <u>Metals</u> <u>Total or Dissolved</u>	
Other:		
# of Bottles on COC correct	<u>Yes</u> No N/A	
Filtered Volume received for Dissolved Tests	<u>Yes</u> No N/A	
Custody Seal Intact	Yes No <u>N/A</u>	
Date/Time Received: <u>10/5/11 @ 072</u>		
Received by: <u>TW</u>		
Due Date on COC match worksheet	<u>Yes</u> No N/A	
Tests Required on COC match worksheet	<u>Yes</u> No N/A	
Verified by: <u>TW</u>	Date: <u>10/5/11</u>	



Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 27, 2011

Mr. Glenn Bishop
Dominion Environmental Biology
4111 Castlewood Road
Richmond, VA 23234

RE: Project Yorktown 002
Pace Project No. 3055214 *393147*

Dear Mr. Bishop:

Enclosed are the analytical results for sample(s) received by the laboratory on October 06, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in cursive ink that appears to read "Jacquelyn Collins".

Jacquelyn Collins

jacquelyn.collins@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Yorktown 002
Pace Project No.: 3055214

Pennsylvania Certification IDs

1638 Roseytown Road Suites 2,3&4, Greensburg, PA 15601
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California/NELAC Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH 0694
Delaware Certification
Florida/NELAC Certification #: E87683
Guam/PADEP Certification
Hawaii/PADEP Certification
Idaho Certification
Illinois/PADEP Certification
Indiana/PADEP Certification
Iowa Certification #: 391
Kansas/NELAC Certification #: E-10358
Kentucky Certification #: 90133
Louisiana/NELAC Certification #: LA080002
Louisiana/NELAC Certification #: 4086
Maine Certification #: PA0091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification
Missouri Certification #: 235
Montana Certification #: Cert 0082
Nevada Certification
New Hampshire/NELAC Certification #: 2976
New Jersey/NELAC Certification #: PA 051
New Mexico Certification
New York/NELAC Certification #: 10888
North Carolina Certification #: 42706
Oregon/NELAC Certification #: PA200002
Pennsylvania/NELAC Certification #: 65-00282
Puerto Rico Certification #: PA01457
South Dakota Certification
Tennessee Certification #: TN2667
Texas/NELAC Certification #: T104704188-09 TX
Utah/NELAC Certification #: ANTE
Virgin Island/PADEP Certification
Virginia Certification #: 00112
Washington Certification #: C1941
West Virginia Certification #: 143
Wisconsin/PADEP Certification
Wyoming Certification #: 8TMS-Q

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Yorktown 002
Pace Project No.: 3055214

Lab ID	Sample ID	Matrix	Date Collected	Date Received
3055214001	Yorktown 002	Water	10/04/11 13:45	10/06/11 10:30

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Yorktown 002
Pace Project No.: 3055214

Lab ID	Sample ID	Method	Analysts	Analytes Reported
3055214001	Yorktown 002	SM 7110C	JAL	1
		EPA 900.0m	EHH	1

REPORT OF LABORATORY ANALYSIS

Page 4 of 10

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PROJECT NARRATIVE

Project: Yorktown 002
Pace Project No.: 3055214

Method: SM 7110C
Description: 7110C Gross Alpha
Client: Dominion Environmental Biology
Date: October 27, 2011

General Information:

1 sample was analyzed for SM 7110C. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:



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PROJECT NARRATIVE

Project: Yorktown 002
Pace Project No.: 3055214

Method: EPA 900.0m
Description: 900.0 Gross Alpha/Beta
Client: Dominion Environmental Biology
Date: October 27, 2011

General Information:

1 sample was analyzed for EPA 900.0m. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

Page 6 of 10

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ANALYTICAL RESULTS

Project: Yorktown 002
Pace Project No.: 3055214

Sample: Yorktown 002	Lab ID: 3055214001	Collected: 10/04/11 13:45	Received: 10/06/11 10:30	Matrix: Water
PWS:	Site ID:	Sample Type:		
Parameters	Method	Act ± Unc (MDC)	Units	Analyzed
Gross Alpha	SM 7110C	2.63 ± 1.13 (1.57)	pCi/L	10/23/11 22:12
Gross Beta	EPA 900.0m	79.7 ± 20.0 (18.7)	pCi/L	10/20/11 16:15



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QUALITY CONTROL DATA

Project: Yorktown 002
Pace Project No.: 3055214

QC Batch: RADC/9859 Analysis Method: EPA 900.0m
QC Batch Method: EPA 900.0m Analysis Description: 900.0 Gross Alpha/Beta
Associated Lab Samples: 3055214001

METHOD BLANK: 355773 Matrix: Water
Associated Lab Samples: 3055214001

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Gross Beta	-0.478 ± 0.643 (1.80)	pCi/L	10/20/11 07:50	



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QUALITY CONTROL DATA

Project: Yorktown 002
Pace Project No.: 3055214

QC Batch: RADC/9889 Analysis Method: SM 7110C
QC Batch Method: SM 7110C Analysis Description: 7110C Gross Alpha
Associated Lab Samples: 3055214001

METHOD BLANK: 357111 Matrix: Water
Associated Lab Samples: 3055214001

Parameter	Act ± Unc (MDC)	Units	Analyzed	Qualifiers
Gross Alpha	2.32 ± 0.989 (1.17)	pCi/L	10/23/11 22:10	



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QUALIFIERS

Project: Yorktown 002
Pace Project No.: 3055214

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty

(MDC) - Minimum Detectable Concentration

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Imposter Note: By giving us from you into accepting French's NET 30 day payment terms and agreeing to let it hang on 1.5% per month for any invoices not paid within 30 days.

Primary Laboratories, Inc.

7423 Lee Davis Road • Mechanicsville, VA 23111 • Telephone (804) 559-9004 • Fax (804) 559-9306

ANALYTICAL LABORATORY REPORT

Dominion Virginia Power
Attn: Glenn Bishop
4111 Castlewood Road
Richmond, Va. 23234

4-Nov-11

Date Received: 8-Oct-11
Date Sampled: 4-Oct-11
Work Order No.: 1110020-01
Client ID:

Outfall Yorktown 002

Test Description	Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Tech. Initials
Pesticides						
Aldrin	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Chlordane	<0.20	0.20	ug/L	EPA 608	14-Oct-11	HV
Dieldrin	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
4,4-DDT	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
4,4-DDE	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
4,4-DDD	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Endosulfan sulfate	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Endosulfan I	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Endosulfan II	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Endrin	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Alpha-BHC	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Beta-BHC	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Delta-BHC	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Gamma-BHC (Lindane)	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Heptachlor	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Endrin Aldehyde	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Heptachlor Epoxide	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Kepone	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Methoxychlor	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Mirex	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Toxaphene	<5.0	5.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1221	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1232	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1242	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1016	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1248	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1254	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1260	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV

Primary Laboratories, Inc.
Results

4-Nov-11

Date Sampled: 4-Oct-11
 Work Order No: 1110020-01
 Client ID: Outfall Yorktown 002

Test Description	Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Tech. Initials
Cyanide	<0.010	0.010	mg/L	4500CN E	7-Oct-11	HV
BOD	4.0	3.0	mg/L	5210 B	5-Oct-11 at 9:00	NA
Color @ pH-7.48	10.0	5.0	PCU	2120 B	6-Oct-11 at 10:00	NA
Bromide	30.11	0.01	mg/L	Titrimetric	1-Nov-11	PB
Sulfide	<0.05	0.05	mg/L	4500S ² E	11-Oct-11 at 8:30	NA
MBAS	0.36	0.01	mg/L	5540C	7-Oct-11	HV
Hydrogen Sulfide	<0.050	0.050	mg/L	376.1	26-Oct-11	HV
Hexavalent Chromium	<0.005	0.005	mg/L	3500	5-Oct-11 at 10:45	PB
Nonylphenol	<0.010	0.010	mg/L	8270C	14-Oct-11	HV
Metals						
Chromium III	<0.02	0.02	mg/L	3120 B	17-Oct-11	HV

Date Sampled: 4-Oct-11
 Work Order No: 1110020-01
 Client ID: Outfall Yorktown 002

Test Description	Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Tech. Initials
Organophosphorus Pesticides:						
Chlorpyrifos	<0.2	0.2	ug/L	EPA 622	14-Oct-11	SC**
Demeton	<1	1	ug/L	EPA 622	14-Oct-11	SC**
Guthion	<1	1	ug/L	EPA 622	14-Oct-11	SC**
Malathion	<1	1	ug/L	EPA 622	14-Oct-11	SC**
Parathion	<1	1	ug/L	EPA 622	14-Oct-11	SC**
Diazinon	<1	1	ug/L	EPA 622	14-Oct-11	SC**

* Analysis sub-contracted to Reed and Associates

Primary Laboratories, Inc.
Results

4-Nov-11

Date Received: 5-Oct-11

Date Sampled: 4-Oct-11

Work Order No: 1110020-02

Client ID: Outfall Yorktown 003s

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Test Description	Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Tech. Initials
Pesticides						
Aldrin	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Chlordane	<0.20	0.20	ug/L	EPA 608	14-Oct-11	HV
Dieldrin	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
4,4-DDT	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
4,4-DDE	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
4,4-DDD	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Endosulfan sulfate	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Endosulfan I	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Endosulfan II	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Endrin	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Alpha-BHC	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Beta-BHC	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Delta-BHC	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Gamma-BHC (Lindane)	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Heptachlor	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Endrin Aldehyde	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Heptachlor Epoxide	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Kepone	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Methoxychlor	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Mirex	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Toxaphene	<5.0	5.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1221	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1232	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1242	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1016	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1248	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1254	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1260	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV

Primary Laboratories, Inc.
Results

4-Nov-11

Date Sampled: 4-Oct-11
 Work Order No: 1110020-02

Client ID: Outfall Yorktown 003s

Test Description	Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Tech. Initials
Cyanide	<0.010	0.010	mg/L	4500CN E	7-Oct-11	HV
BOD	<3.0	3.0	mg/L	5210 B	5-Oct-11 at 9:00	NA
Color @ pH- 7.34	16.0	5.0	PCU	2120 B	6-Oct-11 at 10:00	NA
Bromide	<0.01	0.01	mg/L	Titrimetric	1-Nov-11	PB
Sulfide	<0.05	0.05	mg/L	4500S ² E	11-Oct-11 at 8:30	NA
MBAS	<0.01	0.01	mg/L	5540C	7-Oct-11	HV
Hydrogen Sulfide	<0.050	0.050	mg/L	376.1	26-Oct-11	HV
Nonylphenol	<0.010	0.010	mg/L	8270C	14-Oct-11	HV

Date Sampled: 4-Oct-11
 Work Order No: 1110020-02

Client ID: Outfall Yorktown 003s

Test Description	Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Tech. Initials
Organophosphorus Pesticides						
Chlorpyrifos	<0.2	0.2	ug/L	EPA 622	14-Oct-11	SC**
Demeton	<1	1	ug/L	EPA 622	14-Oct-11	SC**
Guthion	<1	1	ug/L	EPA 622	14-Oct-11	SC**
Malathion	<1	1	ug/L	EPA 622	14-Oct-11	SC**
Parathion	<1	1	ug/L	EPA 622	14-Oct-11	SC**
Diazinon	<1	1	ug/L	EPA 622	14-Oct-11	SC**

** Analysis sub-contracted to Reed and Associates.

Primary Laboratories, Inc.
Results

4-Nov-11

Date Received: 5-Oct-11
 Date Sampled: 4-Oct-11
 Work Order No: 1110020-03
 Client ID:

Outfall Yorktown 004s

393350

Test Description	Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Tech. Initials
Pesticides						
Aldrin	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Chlordane	<0.20	0.20	ug/L	EPA 608	14-Oct-11	HV
Dieldrin	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
4,4-DDT	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
4,4-DDE	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
4,4-DDD	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Endosulfan sulfate	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Endosulfan I	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Endosulfan II	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Endrin	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Alpha-BHC	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Beta-BHC	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Delta-BHC	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Gamma-BHC (Lindane)	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Heptachlor	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Endrin Aldehyde	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Heptachlor Epoxide	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Kepone	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Methoxychlor	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Mirex	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Toxaphene	<5.0	5.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1221	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1232	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1242	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1016	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1248	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1254	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1260	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV

Primary Laboratories, Inc.
Results

4-Nov-11

Date Sampled: 4-Oct-11
 Work Order No: 1110020-03

Client ID: Outfall Yorktown 004s

Test Description	Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Tech. Initials
Cyanide	<0.010	0.010	mg/L	4500CN E	7-Oct-11	HV
BOD	4.2	3.0	mg/L	5210 B	5-Oct-11 at 9:00	NA
Color @ pH-7.12	11.0	5.0	PCU	2120 B	6-Oct-11 at 10:00	NA
Bromide	2.41	0.01	mg/L	Titrimetric	1-Nov-11	PB
Sulfide	<0.05	0.05	mg/L	4500S ² E	11-Oct-11 at 8:30	NA
MBAS	<0.01	0.01	mg/L	5540C	7-Oct-11	HV
Hydrogen Sulfide	<0.050	0.050	mg/L	376.1	26-Oct-11	HV
Nonylphenol	<0.010	0.010	mg/L	8270C	14-Oct-11	HV

Date Sampled: 4-Oct-11
 Work Order No: 1110020-03

Client ID: Outfall Yorktown 004s

Test Description	Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Tech. Initials
Organophosphorus Pesticides						
Chlorpyrifos	<0.2	0.2	ug/L	EPA 622	14-Oct-11	SC**
Demeton	<1	1	ug/L	EPA 622	14-Oct-11	SC**
Guthion	<1	1	ug/L	EPA 622	14-Oct-11	SC**
Malathion	<1	1	ug/L	EPA 622	14-Oct-11	SC**
Parathion	<1	1	ug/L	EPA 622	14-Oct-11	SC**
Diazinon	<1	1	ug/L	EPA 622	14-Oct-11	SC**

** Analysis sub-contracted to Reed and Associates

Primary Laboratories, Inc.
Results

4-Nov-11

Date Received: 5-Oct-11
 Date Sampled: 4-Oct-11
 Work Order No: 1110020-04
 Client ID: *791151*
Intake

Test Description	Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Tech. Initials
Pesticides						
Aldrin	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Chlordane	<0.20	0.20	ug/L	EPA 608	14-Oct-11	HV
Dieldrin	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
4,4-DDT	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
4,4-DDE	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
4,4-DDD	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Endosulfan sulfate	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Endosulfan I	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Endosulfan II	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Endrin	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Alpha-BHC	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Beta-BHC	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Delta-BHC	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Gamma-BHC (Lindane)	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Heptachlor	<0.05	0.05	ug/L	EPA 608	14-Oct-11	HV
Endrin Aldehyde	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Heptachlor Epoxide	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Kepone	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Methoxychlor	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Mirex	<0.10	0.10	ug/L	EPA 608	14-Oct-11	HV
Toxaphene	<5.0	5.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1221	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1232	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1242	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1016	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1248	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1254	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV
PCB-1260	<1.0	1.0	ug/L	EPA 608	14-Oct-11	HV

Primary Laboratories, Inc.
Results

4-Nov-11

Date Sampled: 4-Oct-11
 Work Order No: 1110020-04
 Client ID: Intake

Test Description	Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Tech. Initials
Cyanide	<0.010	0.010	mg/L	4500CN E	7-Oct-11	HV
BOD	<3.0	3.0	mg/L	5210 B	5-Oct-11 at 9:00	NA
Color @ pH- 7.15	7.0	5.0	PCU	2120 B	6-Oct-11 at 10:00	NA
Bromide	29.62	0.01	mg/L	Titrimetric	1-Nov-11	PB
Sulfide	<0.05	0.05	mg/L	4500S ² E	11-Oct-11 at 8:30	NA
MBAS	0.41	0.01	mg/L	5540C	7-Oct-11	HV
Hydrogen Sulfide	<0.050	0.050	mg/L	376.1	26-Oct-11	HV
Hexavalent Chromium	<0.005	0.005	mg/L	3500	5-Oct-11 at 10:45	PB
Nonylphenol	<0.010	0.010	mg/L	8270C	14-Oct-11	HV
Metals Chromium III	<0.02	0.02	mg/L	3120 B	17-Oct-11	HV

Primary Laboratories, Inc.

Results

4-Nov-11

Date Sampled: 4-Oct-11
 Work Order No: 1110020-04
 Client ID: Intake

Test Description	Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Tech. Initials
Organophosphorus Pesticides						
Chlorpyrifos	<0.2	0.2	ug/L	EPA 622	14-Oct-11	SC**
Demeton	<1	1	ug/L	EPA 622	14-Oct-11	SC**
Guthion	<1	1	ug/L	EPA 622	14-Oct-11	SC**
Malathion	<1	1	ug/L	EPA 622	14-Oct-11	SC**
Parathion	<1	1	ug/L	EPA 622	14-Oct-11	SC**
Diazinon	<1	1	ug/L	EPA 622	14-Oct-11	SC**

*All methods are Standard Methods 18th Edition unless otherwise noted.

** Analysis sub-contracted to Reed and Associates.

Signature:

Parry L. Bragg
Laboratory Manager

Date:

11-14-11

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